PUNJAB DISTRICT GAZETTEERS

LUDHIANA

BY

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Price : Rs. 42.75 paise

CONTROLLER OF PRINTING AND STATIONERY, CHANDIGARH,
1970

GAZETTEER OF INDIA

PUNJAB

LUDHIANA

PUBLISHED BY THE GOVERNMENT OF PUNJAB
(REVENUE DEPARTMENT, CHANDIGARH)

FOREWORD

The revision of the Ludhiana District Gazetteer, incidentally the first in the reorganised State of Punjab, is indeed a matter of considerable significance. Although the Gazetteer Unit was set up in the State several years ago, the work could not make much progress. Consequent upon the reorganisation of the Punjab in 1966, even the drafts of some of the district gazetteers at various stages of revision were lost since the territories covered by them were included in the new State of Haryana or the Union Territory of Himachal Pradesh. As such the gazetteers of all the eleven districts in the re-organised State of Punjab had to be revised *de novo*.

The revision of the Ludhiana district gazetteer taken up after reorganisation of the Punjab in 1966 could not, however, make much headway because the State Editor had proceeded on long leave. His successor joined only in July, 1968. He has handled the job with commendable alacrity. After the collection of requisite information from quarters concerned he has completed the revised draft in a short period. The rapid progress of the work under his stewardship is largely due to his vast experience of historical research, first hand knowledge of source materials and intensive study of Punjab history.

सत्यमेव जयते

Ludhiana district is by far the most important industrial and agricultural centre in the State. More than any other district, Ludhiana claims the credit for remarkable development of small and large scale industries and increase in agricultural production. The revision of the gazetteer of the notable district will high-light the outstanding progress it has made since partition as a result of the dynamic developmental programmes undertaken in the State in general and in this district in particular.

It is gratifying to note that the Central Government Gazetteers Unit has readily approved the draft prepared by the State Organisation and it has been found to be up to the mark. The State Editor and his team, therefore, deserve to be complimented for the creditable performance.

The revised Gazetteer drawn up according to the new pattern prescribed by the Government of India will be found to be far more comprehensive in scope and informative in character than the last Gazetteer written in 1904. As an up-to-date compendium of information about the district, the new publication will be found to be rewarding both for the general reader and the scholar.

H. B. LALL,

Financial Commissioner, Revenue,
Punjab, Chandigarh.
26-12-1969.

PREFACE

Ever since the inception of the district gazetteer as the compendium of information about a specified administrative and territorial unit generally designated after the name of the headquarter town, the compilation was expected to be periodically revised in order to make the publication as up-to-date and comprehensive as possible. Thus the British, to whom the credit for the preparation of the peculiar type of Handbook belongs, wanted to provide the senior most officer concerned with the administration of the district a handy reference book containing detailed information on all sorts of subjects with which he had to deal. In the early days of British administration land revenue formed the sinews of the financial resources of the Government. Settlement and assessment of land revenue was carried out after a certain period to enable the Government to take stock of material progress of the people and revise land and water rates. As such the revision of the district gazetteer was enjoined to coincide with the new settlement and was required to be undertaken by the Settlement Officer for the obvious reason that he was expected to possess the latest information about the district and its people.

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To ensure uniformity the Central Government on its part laid down the general lines on which the revision of the district gazetteers was to be periodically carried out. As early as 1902 the Home Department, Government of India, in its letter No. 3375, dated 1st October, 1902, had given clear guidelines in this regard : "When a new district gazetteer is to be issued it should consist of 2 parts, (A) and (B) and should conform to the following general pattern.—

(i) All descriptive matter about the district should go into part (A) and should contain only such general figures as are necessary to elucidate the remarks in the text. All statistical data should be relegated to part (B).

(ii) On the occasion of the next periodical revision the statistics in part (B) should be recompiled. To it may also be added such material that might be required to correct or supplement the information contained in Part (A). Thus in case there had been a famine since part (A) was written or if a new Railway had been opened and so on, information on these points should be incorporated in part (B), as supplementaries to the appropriate chapter of part (A).

(iii) The process should continue until the revision of part (A) is called for. Then part (A) should be drawn up with the help of all the supplementary information available up-to-date. Part (B) should also revert to its original form as statistical appendix.

(iv) A new edition of part (B) may be conveniently issued after each Census. The revision of part (A), to be ordinarily left to the discretion of the local Government, may coincide with the completion of the new settlement.

For various reasons the procedure indicated above could not be followed in the Punjab and the district gazetteers, in most cases, have remained unrevised for over 50-60 years. For one thing, new settlements had not regularly taken place in the majority of the districts ; and in the case of one or two districts where the settlements had been undertaken, the district gazetteers were revised in a hurried manner and could neither be considered to be comprehensive nor up-to-date. The last edition of the Ludhiana district gazetteer was issued so far ago as 1904. The information contained therein has not only been rendered obsolete ; but has become largely useless as a result of stupendous socio-political developments in the district. Even in the normal process of administration, the phenomenal development of the district during the last sixty years or so

should have rendered the information contained therein unsatisfactory. But in this particular case the partition of the country and the tremendous all round development thereafter have made the whole gazetteer completely out of date. A new edition of the district gazetteer was, therefore, considered to be most imperative and long overdue.

In pursuance of the general plan formulated by Government of India for the revision of district gazetteers in the country, the work was launched in the State as early as 1960 under the Second Five-Year Plan. The new gazetteers were required to be not merely enlarged editions of the old compilations ; but were proposed to be drawn up according to an entirely new pattern in keeping with the new national set up in the country. The district gazetteer was not merely to be used as a reference book ; but was designed to reflect the life of the people in its political, social, economic and cultural aspects. More than that, it was expected to be a dependable record of local history to give the people the sense of tradition and a new inspiration for developmental activities.

During the years 1960 to 1966, the Gazetteers organisation in the Punjab had taken up the revision of Rohtak, Karnal, Gurgaon and Simla Districts. The drafts undertaken were at various stages of completion and only the revised district gazetteer of Rohtak District had been provisionally approved for publication. The reorganisation of the State in 1966 has deprived the new State of Punjab of the above districts. Consequently all the districts of the present Punjab required the revision of the district gazetteers.

Work on the revision of Ludhiana district gazetteer was started some time in 1965. After the reorganisation of the State in 1966 the same was continued. By about July, 1968, about half the number of chapters under the new plan had been written in the tentative/preliminary form. The slow progress of the work was partly due to the fact that the former State Editor had proceeded on long leave for over a year. The scheme drawn up for re-organisation of the gazetteers unit

in 1965 had also to be deferred in view of the impending re-organisation of the State. As a result of these developments the progress of revision of district gazetteers in the Punjab remained unavoidably slow.

To ensure expeditious completion of the important work, the Director of Archives and Curator, State Museum, Punjab, was appointed the new State Editor in May, 1968. He could, however, join the new post in July, 1968. On taking stock of the position of the revision of District Gazetteers in the State, it was keenly felt that special efforts would be necessary to clear the heavy back log and bring the Punjab in line with the other States. The reorganisation of the Unit also required urgent attention. The position was carefully reviewed and a fresh plan was prepared for the revision of all the district gazetteers in the Punjab during the period of the Fourth Five-Year Plan, 1969—74. Despite the serious handicap of the existing skeleton staff, the revision of the Ludhiana district gazetteer has been completed in a short period of about 10 months. Extensive touring of the district had to be undertaken in order to supplement and verify the information already collected or to collect at personal level information not already furnished by the agencies or individuals concerned. Utmost care has all along been taken to strictly follow the pattern prescribed by the Government of India and to make the new gazetteer as comprehensive as possible.

The staff allocated to the reorganised State of Punjab for the revision of the district gazetteers was further handicapped by imbalance caused by the reorganisation in 1966. Inspite of all sorts of difficulties and disabilities it must be said to the credit of the team work of all the members that the stupendous task of the revision of the Ludhiana District Gazetteer has been completed on schedule. Rapid progress of the long pending work was, of course, mainly due to the deep personal interest taken by the Financial Commissioners (Revenue)—Shri A.L. Fletcher, I.C.S., Sirdar Gian Singh Kahlon, I.C.S., Shri C.D. Kapur, I.A.S., Shri H.B. Lall, I.A.S. and Shri S.S. Grewal, I.A.S., during the period of the preparation of the present draft.

Notwithstanding their heavy preoccupation with other official work, they were good enough to spare time to review the progress at short intervals and to remove impediments, if any, in the smooth working of the Organisation.

Special mention in this regard must also be made of the ungrudging and generous co-operation of the Central Government Gazetteers Organisation and especially of Dr. P.N. Chopra, Editor, Gazetteers, for prompt scrutiny of the draft. Requisite guidance and assistance was afforded by Dr. Chopra and his staff in the quickest possible manner.

The accelerated progress of the revision work is due in a very large measure to the prompt attention paid to the requisitions of the Gazetteers Organisation by Shri Darshan Kumar, I.A.S., Deputy Secretary, Revenue II, in particular and various branches of the Financial Commissioner Revenue's Office in general. The Librarian of the Financial Commissioner's Office Library also deserves to be thanked for his help in the supply of books, periodicals and other accessories. The successful completion of the first revised district gazetteer in surprisingly short period is also largely the result of the unstinted co-operation of other State Government departments/offices and non-official organisations and individuals, for which they deserve due acknowledgement.

The first revised district gazetteer has perforce been drawn up with some sense of urgency. All the same it may be assured that any suggestions for improvement would be gratefully received and would be incorporated in the subsequent editions or the new gazetteers to be taken up for revision. The Ludhiana District Gazetteer may, however, be taken as an earnest of the firm resolve to complete the job, which for various reasons had fallen into heavy arrears, without any further delay. The first publication in the new form and according to the All-India pattern may, therefore, be accepted as the proof of the

spirit of dedication with which it has been pushed through despite all sorts of obstacles.

V. S. SURI,
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Chandigarh.
30-3-1970.

सत्यमेव जयते

CONTENTS

	Page
Foreword	i-ii
Preface	i—vi
Contents	i-iii
List of Maps, Charts, Graphs and Illustrations	i-ii

CHAPTER I—GENERAL .. 1—57

Introductory—1 ; Topography—7 ; River system and water resources —9 ; Geology—11 ; Flora (Botany)—12 ; Fauna (Zoology)—13 ; Climate—14 ; Appendices—23.

CHAPTER II—HISTORY .. 58—124

Importance of Ludhiana District in Punjab History— 58 ; Machhiwara —58 ; Sunet—59 ; Tihara—59 ; The Yaudheyas—60 ; Turks and Afghans—61 ; The Great Mughals—62 ; Decline of the Mughal Empire and the Rise of the Sikhs—63; Cis-Satluj Territory under British Protection, (1809-1845)—75; The Great Uprising of 1857—86; The Namdhari Movement—98 ; New Phase of Freedom Movement—104 ; The Ghadar Movement, (1913-15)—107 ; Between the Two World Wars—111 ; Heroes of NEFA and Ladakh Campaigns (1962-63) and Indo-Pakistan Conflict (1965)—118 ; Appendix—121.

CHAPTER III—PEOPLE .. 125—182

Introductory—125 ; Total Population—128 ; Language—133 ; Religion and Castes—137 ; Social Life—152 ; Rehabilitation—172.

CHAPTER IV—AGRICULTURE AND IRRIGATION .. 183—245

Land Reclamation and Utilisation —183 ; Irrigation—185 ; Agriculture including Horticulture—193 ; Animal Husbandry and Fisheries—225 ; Forestry—237 ; Floods—239 ; Famines—240 ; Appendices—243.

CHAPTER V—INDUSTRIES .. 246—300

Old Time Industries and Industrial Development of Ludhiana—246 ; State Aid to Industries—249 ; Industrial Training—258 ; Industrial Areas and Estates—259 ; Sources of Power—259 ; Growth and Development of Industry—262 ; Large Scale Industries—263 ; Small Scale Industries—272 ; Village Industries—281 ; Role of Industrial Co-operatives—284 ; Manufacturers' Associations—287 ; Industrial Labour—288 ; Appendix—289.

सत्यमेव जयते

	Page
CHAPTER VI—BANKING, TRADE AND COMMERCE ..	301—326
Banking and Finance—301 ; Trade and Commerce—311 ; Appendices—322.	
CHAPTER VII—COMMUNICATIONS ..	327—362
Old Time Trade Routes and Highways and Modes of Conveyance—327 ; Road Transport—327 ; Railways —332; Waterways, Ferries and Bridges—335 ; Travel and Tourist facilities—336 ; Posts, Telegraphs and Telephones—337 ; Radio and Wireless Stations—339 ; Appendices—340.	
CHAPTER VIII—MISCELLANEOUS OCCUPATIONS ..	363—369
Public Services—363 ; Army—364 ; Educational Services—364 ; Medical Profession—365 ; Legal Profession—366 ; Engineering Profession—366 ; Transport Services—366 ; Personal Services—367; Other Miscellaneous Occupations—368 ; Domestic Servants—368.	
CHAPTER IX—ECONOMIC TRENDS ..	370—395
Livelihood Pattern and General Level of Prices and Wages—370 ; Employment Situation—376 ; Planning and Community Development—380 ; Appendices—382.	
CHPATER X—GENERAL ADMINISTRATION ..	396—408
Historical Background and Sub-Divisions of the District—396 ; District Authorities—398 ; Development Organisation—401 ; Panchayati Raj —401 ; General arrangement for disposal of business—403 ; District Committees—405 ; Other important offices—406 ; Other State and Central Government Officers—406.	
CHAPTER XI—REVENUE ADMINISTRATION ..	409—448
Land Revenue Administration—409 ; Land Reforms—436 ; Other Sources of Revenue, State and Central—440 ; Appendix—448.	
CHAPTER XII—LAW AND ORDER AND JUSTICE ..	449—486
Incidence of Crime—450 ; History and Organisation of Police—461 ; Jails and Lock-ups—473 ; Organisation of Civil and Criminal Courts —480 ; Bar Associations—485 ; Appendix—486.	
CHAPTER XIII—OTHER DEPARTMENTS ..	487—496
Irrigation Department—487 ; Public Works Department—488 ; Punjab State Electricity Board—489; Co-operative Department—490 ; Finance Department—491 ; Animal Husbandry Department—492 ; Public Relations Department—493 ; Food and Supplies Department —493 ; Planning Department—494 ; National Savings Organisation—495 ; Language Department—496.	

Page

CHAPTER XIV—LOCAL SELF GOVERNMENT .. 497—526

History of Local Self Government in the District—497 ; Municipalities—501 ; Town Planning and Public Health—509 ; Panchayati Raj —513 ; Gram Panchayats—514 ; Panchayat Samitis—518 ; The Zila Parishad—522.

CHAPTER XV—EDUCATION AND CULTURE .. 527—562

Historical Background—527; Literacy and Educational Standards—534 ; General Education—538 ; Professional and Technical Education—548 ; Physical Education—555; National Fitness Corps, National Cadet Corps and Scouts and Guides—555 ; Sports—557 ; Cultural and Literacy Societies and Periodicals—559; Libraries—560.

CHAPTER XVI—MEDICAL AND PUBLIC HEALTH SERVICES 563—585

Survey of Public Health and Medical facilities in early times—563 ; Vital Statistics—564 ; Diseases Common in the District—565 ; Organisation of Medical and Health Services—570; Private Hospitals and Nursing Homes—576; Appendices—582.

CHAPTER XVII—OTHER SOCIAL SERVICES .. 586—612

Labour Welfare—586 ; Prohibition—593; Advancement of Backward Classes and Tribes—594 ; Other Social Welfare Activities—608 ; Public Trusts, Charitable Endowments, Muslim Wakfs, etc.—609 ; Appendix—610

CHAPTER XVIII- PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE ORGANISATIONS .. 613--637

Representation of the District in the State and the Union Legislatures—613; Political Parties and Organisations -521; Newspapers—627; Voluntary Social Service Organisations—533.

CHAPTER XIX—PLACES OF INTEREST .. 638—672

Introductory—638 ; Ludhiana Tahsil—638 ; Alamgir—638 ; Bhaini Sahib—639 ; Chhapar—641 ; Dehlon—642 ; Doraha—642; Ghurani Kalan—642 ; Gujarwal—643 ; Gurm—644 ; Katani—644 ; Knech—646 ; Lalton—645 ; Ludhiana—645 ; Malaudh—649 ; Payal—650 ; Qila Raipur—651 ; Rara (Sahib)—652 ; Sahnewal—652 ; Siahar—652 ; Sunet—653 ; Jagraon Tahsil—654 ; Bhundri—654 ; Guru Sar Sadhar—655 ; Hatur—656; Jagraon—657; Nanaksar—660; Raikot—661 ; Tihara—662 ; Samrala Tahsil—663 ; Bahlolpur—663 ; Jhar Sahib—663 ; Khanna—664 ; Lal Kalan Gurdwara (Guru-Sar)—665 ; Machhiwara—665 ; Rahawan—667 ; Serai Lashkari Khan—667 ; Samrala—667 ; Sanghol—668 ; Appendices—670

BIBLIOGRAPHY 673-674

INDEX .. .. 675—694

LIST OF MAPS, CHARTS, GRAPHS AND ILLUSTRATIONS

Serial No.	*Particulars*	*Facing Page*
1	Map of Ludhiana District (General) ..	5
2	A Tunnel Inside the Ludhiana Fort ..	76
3	Erstwhile Residence of Shah Shuja-ul-Mulk ..	80
4	Stone Inscription at the Erstwhile Residence ..	80
5	*Do Manzli Masjid*, Ludhiana ..	82
6	Residence of Lala Lajpat Rai, Jagraon ..	105
7	Chart Showing Growth of Population ..	128
8	Chart Showing Population at a Glance ..	129
9	Presbyterian Church, Ludhiana ..	138
10	Ewing Christian School, Ludhiana ..	138
11	Inner View of the Church ..	138
12	Inscriptions in the Church ..	138
13	Chart Showing Land Utilisation, 1965-66 ..	183
14	Map of Ludhiana District Showing Irrigation System ..	190
15	Punjab University Extension Library, Ludhiana ..	562
16	Graph Showing Birth and Death Rate per Thousand of Population ..	582
17	Map of Ludhiana District Showing Places of Interest ..	638
18	Gurdwara Manji Sahib, Alamgir ..	639
19	Satsang Ghar at Bhaini ..	640
20	Namdharis Holding Satsang ..	640
21	*Sada Barat* ..	640
22	"Akal Bunga" (Place of Meditation) of Guru Ram Singh ..	640

Serial No.	*Particulars*		*Facing page*
23	*Masnad* of Guru Ram Singh	..	641
24	Gaddi Sahib—Place of Worship of Guru Hari Singh	..	641
25	*Angrakha* of Guru Hargobind, Gurdwara Ghurani Kalan	..	643
26	Gurdwara Karam Sar (Rara)	..	652
27	Tomb of Rai Firoz, Hatur	..	656
28	Inscription at the tomb of Rai Firoz, Hatur	..	656
29	Pir Lape Shah's Place of Sitting, Jagraon	..	658
30	Tomb of Hazrat Mohkam Din, Jagraon	..	658
31	Inner View of the Tomb	..	658
32	Gurdwara Nanaksar	..	660
33	A Painting of Guru Gobind Singh Inside Gurdwara, Raikot	..	661
34	Gurdwara Raikot	..	661
35	Gurdwara Lal Kalan	..	665
36	Serai Lashkari Khan	..	667
37	Old Serai at Doraha	..	667

सत्यमेव जयते

CHAPTER I

GENERAL

(a) INTRODUCTORY

(i) **Origin of the name of the district.**—The district is named after Ludhiana city which forms its headquarters. Ludhiana or Lodiana, is called after the Lodis, which dynasty ruled at Delhi from A.D. 1451 to 1526. The two Lodi Chiefs, Yusaf Khan and Nihang Khan, deputed by Sikandar Lodi (A.D. 1489—1517) to restore order in the region, fixed their headquarters on the present location of Ludhiana city, which was at the time no more than a village called Mir Hota. Legend has it that Yusaf crossed the Satluj to check the Khokhars, who were then plundering the Jullundur Doab, and settled at Sultanpur ; Nihang Khan remained at Mir Hota as the Emperor's lieutenant and called the place Ludhiana.

(ii) **Location, general boundary, total area and population of the district.**—Ludhiana is the most south-easternly of the seven districts of the Jullundur Division. It lies between 30°—33′, 31°—1′ north latitudes and 75°—25′ and 76°—27′ east longitudes. It is bounded on the north by the river Satluj, which separates it from Jullundur District. The river also forms the boundary between Ludhiana and Hoshiarpur Districts. To the east, the district adjoins Ropar District and Chandigarh Union Territory and to the west Ferozepore District while to the south and south-east it is bounded by Sangrur and Patiala Districts, respectively. The district is almost a rectangle having a length along the Satluj of nearly 96 kms., while its breadth, north and south, is about 39 kms.

The district is divided into three tahsils—Samrala to the east, Jagraon to the west, and Ludhiana in the middle. Half way along the northern border of the district and 11 kms. south of the Satluj is the city of Ludhiana, the headquarters of the district. Besides lying on the Grand Trunk Road 307 kilometres from Delhi, 93 kilometres from Chandigarh and about 122 kilometres from Ferozepore, Ludhiana is an important junction on the Northern Railway, from which the Ludhiana-Dhuri-Jakhal and Ludhiana-Ferozepore railways take off. All important places in the district are interlinked by rail or road.

The total area of the district is about 3,614.44 square kilometres comprising tahsil Samrala 873 square kilometres, tahsil Jagraon 1,064.60 square kilometres, and tahsil Ludhiana 1,676.84 square kilometres (including sub-tahsil Payal, 227.84 square kilometres).

The total population of the district, according to 1961 Census, is 1,022,519 comprising 551,304 males and 471,215 females.

(iii) History of the district as an administrative unit and the change in its component parts:

Political Agency[1].—After the conclusion of the treaty of Amritsar in 1809 with Maharaja Ranjit Singh, whereby the Satluj was recognised as the boundary between the two Governments, the East India Company established a Political Agency at Ludhiana and the same continued there up to 1815 under Col. David Ochterlony. In October, 1914, Col. Ochterlony was ordered against the Gurkhas and returned to Ludhiana on the conclusion of the campaign in June, 1815. On resumption of duties at Ludhiana, he was vested with control over the territories conquered from the Gurkhas under the designation of Superintendent of Political Affairs and Agent to the Governor-General in the territories of the Protected Sikh and Hill Chiefs between the Yamuna and the Satluj with Capt. G. Birch, Assistant at Nahan and R. Ross, Assistant at Sabathu. In October, 1815, the headquarters of the Superintendent and Agent to Governor-General were transferred from Ludhiana to Karnal.

Lt. W. Murray was posted as Assistant Agent to Governor-General in November, 1816, to look after the Kabul Royal Family and hold charge of the Treasury, Abkari Mahal and the police at Ludhiana. He was succeeded by Lt. Col. C. M. Wade at Ludhiana on March 6, 1823.

In October, 1827, the Political Agent, Ambala, was relieved of the charge of the Lahore Dependencies and this work was to be conducted by Political Assistant, Ludhiana, in subordination to the Resident at Delhi. In 1832, Capt. Wade's designation was changed from Political Assistant, Ludhiana, to Political Agent, Ludhiana. In 1840, Capt. Wade was succeeded by Mr. G. R. Clerk as Political Agent, Ludhiana[2].

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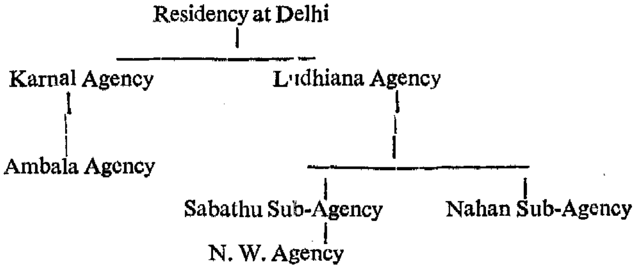
1. The setting up of the Residency at Delhi in 1803 and Agencies at Ludhiana and other places in Cis-Satluj territory may be illustrated by the following chart :—



2. *'British Residency and Agency System in N. Western India'* ; Suri, V. S. "*Panjab Past aud Present*", Vol. II, Part I, April, 1968, Punjabi University, Patiala, p. 25.

Protected Cis-Satluj States[3].—The Cis-Satluj States brought under British protection comprised a tract of country which intervened between the British North-West or Yamuna Frontier and the Satluj. The Sikh possessions or States south of the Satluj were no more than a congeries of petty chiefships and signatories, with discordant political interests, united by no tie except that of a vague theocratic nationality. The sub-divisions were about sixty thousand in number ; in size and importance, they varied from the sovereignty of Patiala, worth twenty-five lakhs a year, to the pettiest lordship or barony, consisting of the tenth or twentieth share in a single village.

The natural consequence of the position, which the British Government had assumed at the request of the chiefs was the rendering of feudal service, if an emergency should arise ; and the lapse or escheat of heirless fiefs to the paramount sovereign. The feudal contingents were not, till long afterwards, recorded and were rarely called out. But, in the course of years, several chiefships lapsed, and then the British Government acquired strips of territory around Ludhiana, Ferozepore, and Ambala; these lapsed estates were administered on the same principles as other non-regulation districts, the political agent being Commissioner, and his Assistants as district officers.

When the Sikh army crossed the Satluj in 1845, the possessions of the Lahore Durbar, south of the river, were confiscated by the British Government, and the protected chiefs having, as a body, failed in their duty to their paramount during the war, were, at its close, with certain exceptions, deprived of their Foujdaree, or civil powers. Their fiscal power, however, that is their right to collect revenue, remained untouched.

Foundation of the Civil Administration in the Cis-Satluj region.—The British territory, Cis-Satluj, having now reached a considerable magnitude, and the deprivation of the chiefs, having rendered the Government responsible for the direct control in many States hitherto independent, a Commissioner, Colonel Mackeson, with a proportionate staff of Assistants, was appointed and placed under the orders of the Agent, Governor-General, whose headquarters had

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[3]. "The opening years of the 19th century witnessed a new phase of British expansion in N. W. India. Even though the policy of aggressive conquests, which had already reached a high watermark, appeared to have been replaced by a policy of wilful restraint and non-interference, the paramount power was anxious to evolve a new technique of peaceful penetration for the extension of its sphere of influence. How far the new policy was successful in bringing new territory under the control of the East India Company through the exercise of its purposeful protection is amply illustrated in the organisation of the system of Political Residency and Agencies in North Western India. The expedient proved to be admirably effective for the expansion and consolidation of British rule in the region." (*Ibid.*, p. 23.)

since the Campaign (1846) been moved from Ambala to Lahore. A Sessions Judge, Mr. Erskine, was also appointed. A summary settlement was effected in the new British possessions, and within the same year a revenue survey, and a regular settlement were commenced ; and in all other points the same system of administration was carried out as was subsequently introduced in the annexed Punjab. Thus, the foundation was laid for civil administration in the territories of the deprived chiefs.

When, after the second treaty with the Lahore Durbar concluded at Bhyrowal, the Agent, Governor-General, became Resident at Lahore, the Commissioners of the Cis and Trans-Satluj States were authorised to correspond directly with the Government ; but in 1848 they were again made subordinate to the Resident in his capacity as Chief Commissioner. After the annexation of the Punjab in 1849, the Cis-Satluj States were placed on the same footing as the other Commissionerships, under the Board of Administration. The offices of Sessions Judge and Commissioner were united in the person of Mr. Edmonstone. The territory was divided into five districts, namely, Ferozepore, Ludhiana, Ambala, Thanesar and Simla.

Civil Administration.—To aid the civil authorities in the preservation of order, one regiment of Sikh infantry was stationed at Ludhiana and another at Ambala. The principles of administration, civil, criminal and police, did not differ from those applicable to the Punjab proper. The revenue survey for the entire territory had been completed. The regular settlement had been conducted in a very elaborate manner in the districts of Ambala and Thanesar. It was somewhat advanced in Ludhiana, and had been commenced at Ferozepore.

Ludhiana and the surrounding areas had been bestowed by Maharaja Ranjit Singh on Raja Bhag Singh of Jind on account of the relationship of the family with his mother. On the death of Raja Sangat Singh of Jind in 1835 and the failure of the direct line of heirs, it was decided by the British that Sarup Singh, a collateral of the late ruler of the State, should succeed to only such of the possessions of Raja Sangat Singh as had been originally inherited from Raja Gajpat Singh and all subsequent acquisitions should be escheated to the British. Thus more than 80 villages round Ludhiana and Bassian (Jagraon tahsil) were acquired and formed the nucleus of the present district. The administration of the area was carried on by the Assistant Political Agents at Ludhiana till the close of First Anglo-Sikh War in 1846.

Consequent upon the assumption of direct administration of considerable area around Ludhiana, the district thus formed received greater attention and rapidly developed into a flourishing centre of trade and commerce. The political importance and the strategic situation of Ludhiana were further

responsible for its rapid growth until it was made a part of the Punjab after the annexation of the kingdom of Lahore in 1849.

The district practically assumed its present dimensions in 1850. The initial portion consisted of the estates belonging to Jind State, which lapsed in 1835 on the death of Raja Sangat Singh. These estates included Ludhiana itself and 84 villages, yielding a revenue of Rs 98,229.

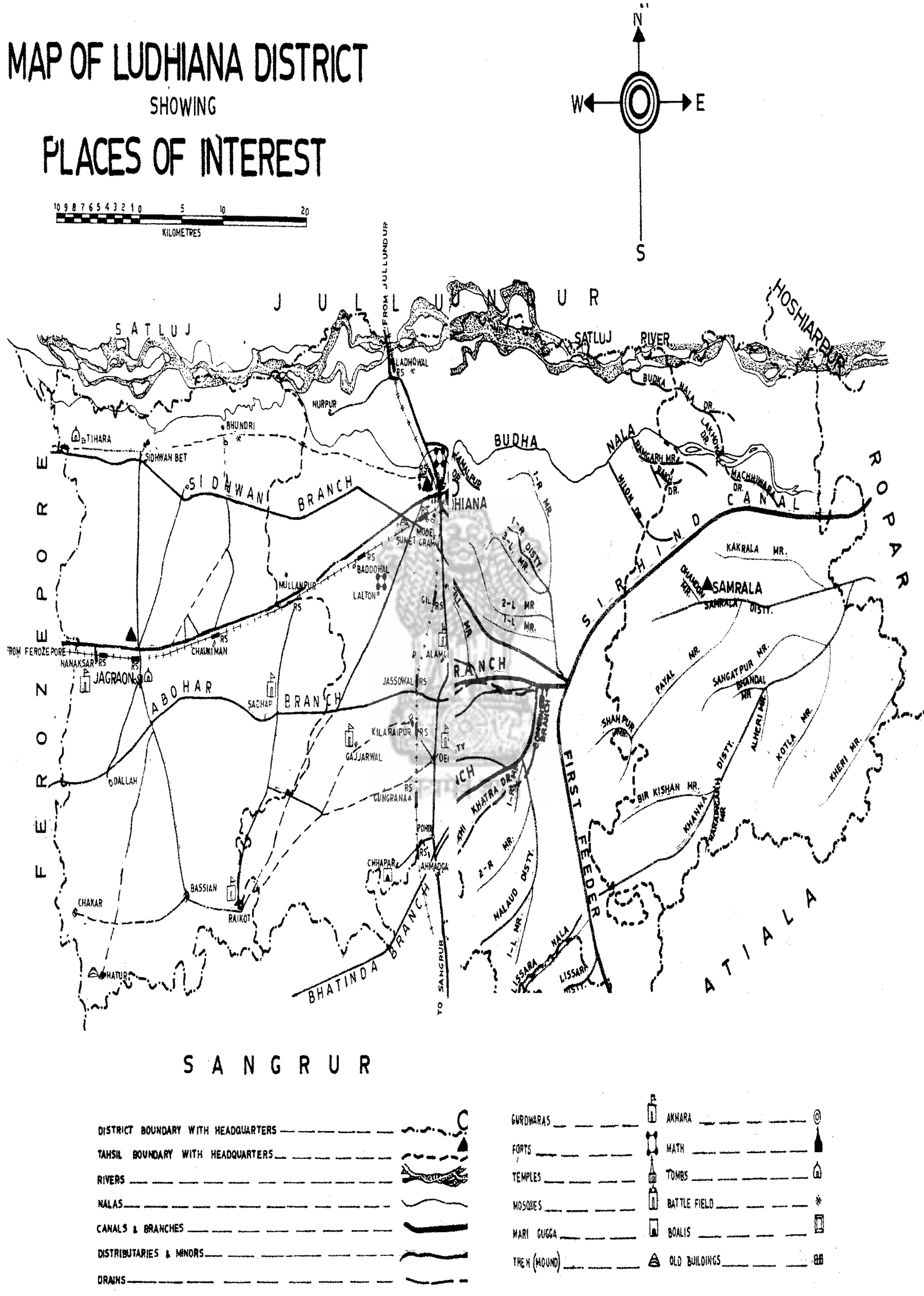
The district continued to be governed like the rest of the territories which were added to British India under a Board of Administration. The Board exercised executive authority through the Deputy Commissioner, who was incharge of the district. The Deputy Commissioner could, however, be entrusted with special powers to deal with financial and criminal work. Under the new administrative set-up, the Deputy Commissioner as the principal District Officer was called upon to organise effective police control, take possession of forts and public buildings and arrange for prompt collection of land revenue. On the completion of these preliminary arrangements, regular administration was set up and, on the abolition of the Board in 1853, a Chief Commissioner was appointed as the head of the local civil administration.

The period of administration under the Chief Commissioner was mainly devoted to consolidation of the administrative system and the completion of measures started in the earlier years. The arrangements continued till the Great Uprising of 1857, which called for radical changes in the administration. In the beginning of 1859, the Punjab, including Delhi territory, was placed under a Lt. Governor. The country east of Satluj, formerly known as Cis-Satluj States, became an integral part of the Punjab proper and was placed under a uniform system of administration. The pattern of district administration thus evolved has continued in the district ever since.

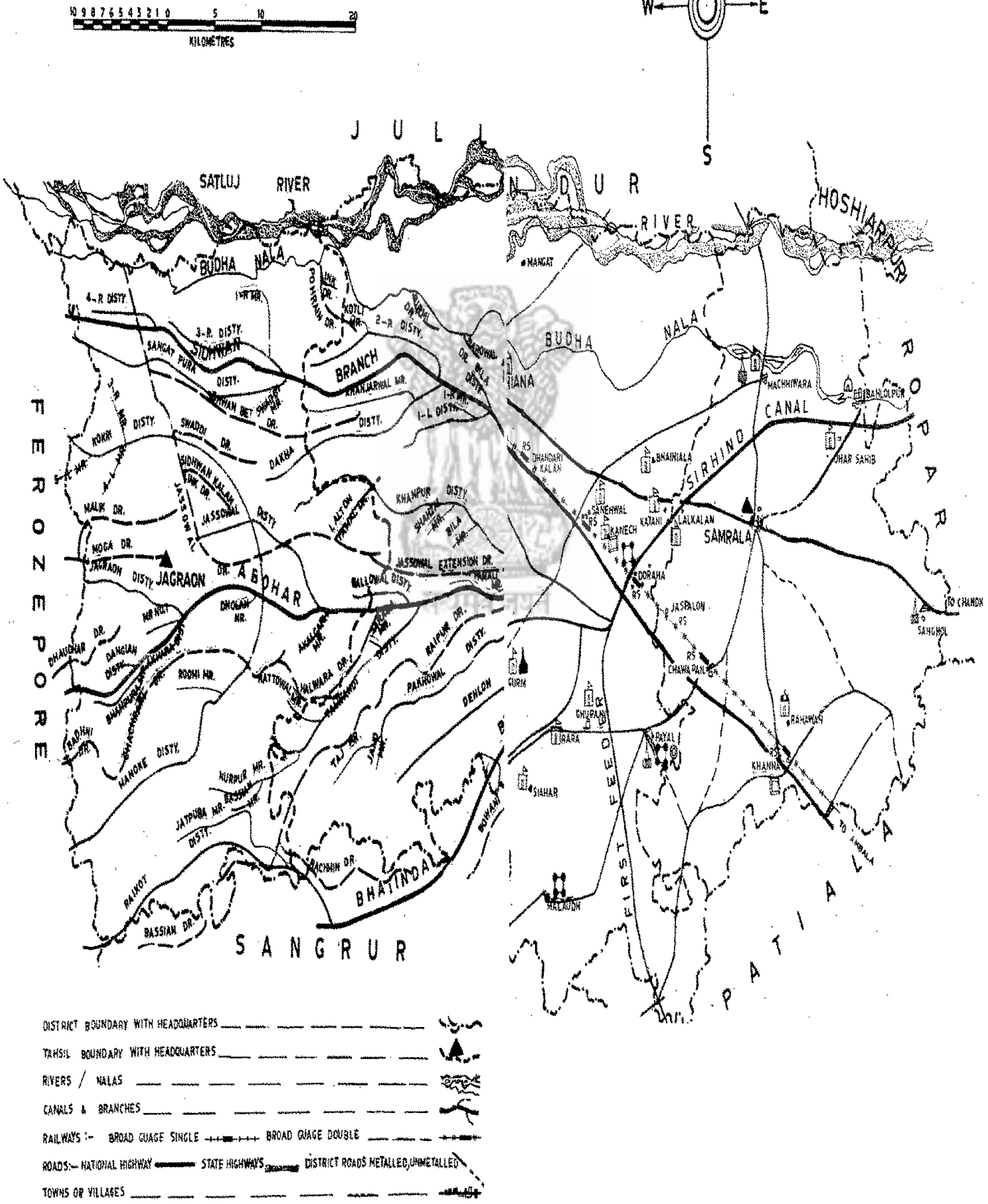
From the time of the constitution of the district in 1850 up to 1866, it was divided into four tahsils : Samrala (called at one time Sarai Lashkari Khan), Ludhiana, Pakhowal and Jagraon. These tahsils comprised the following parganas :—

Tahsil		*Pargana*
Ludhiana	..	Umedpur
		Bhartgarh
		Dakha
		Sahnewal
		Ludhiana
		Nurpur
Pakhowal	..	Akalgarh
		Bassian

MAP OF LUDHIANA DISTRICT
SHOWING
PLACES OF INTEREST



MAP OF LUDHIANA DISTRICT
SHOWING
IRRIGATION SYSTEM



Tahsil		*Pargana*
		Pakhowal
		Gungrana
		Malaudh
Samrala	..	Utalan
		Bahlolpur
		Khanna
Jagraon	..	Bhundri
		Jagraon
		Sidhwan
		Siwaddi
		Hatur

In 1866, Pakhowal tahsil was broken up on administrative grounds ; the parganas of Pakhowal, Gungrana and Malaudh were added to Ludhiana, and those of Akalgarh and Bassian to Jagraon. There are now three tahsils, with headquarters at Ludhiana, Samrala and Jagraon.

Under the Absorption of Enclaves Order, 1950, 63 villages of tahsil Sirhind of the Sirhind District [since abolished on the merger of Patiala and East Punjab States Union (Pepsu) with the Punjab in 1956] were merged with Samrala tahsil of Ludhiana District, and 39 villages of the district were transferred to Barnala tahsil of Barnala District (abolished in 1956 and renamed as Sangrur District).

In 1959 village Bahadurgarh, with an area of one square mile (1.6 km) in Ludhiana tahsil, was transferred to Malerkotla tahsil of Sangrur District.

On November 12, 1963, Payal sub-tahsil was transferred from Sirhind tahsil of Patiala District mainly to Samrala tahsil of Ludhiana and partly to Malerkotla tahsil of Sangrur District. Thus its ten villages, viz., Neelo Khurd, Lal Kalan, Baoo Pur, Kubba, Khera, Sultanpur, Balala, Mahdoodan, Tam Kandi and Lapon were included in Samrala tahsil of Ludhiana District, and four villages, viz., Moranwali, Lassoi, Bhurthala Mander and Sirthala, were included in Malerkotla tahsil of Sangrur District. With the exception of the abovementioned 14 villages, Payal sub-tahsil was included in Ludhiana tahsil of Ludhiana District.

On December 21, 1963, Sirthala village was transferred from Malerkotla tahsil of Sangrur District to Payal sub-tahsil (in Ludhiana tahsil) of Ludhiana District, while village Hazurgarh of Payal sub-tahsil (in Ludhiana tahsil) of Ludhiana District was transferred to Malerkotla tahsil of Sangrur District.

As a result of the above mentioned additions and alterations in the boundaries of the district, the present area of Samrala tahsil is 873 square kilometres and that of Payal sub-tahsil is 227 square kilometres.

(iv) **Sub-Divisions, Tahsils and Thanas.**—The district is divided into three tahsils, viz., Samrala, Jagraon and Ludhiana and a sub-tahsil, Payal, which is under Ludhiana tahsil for administrative purposes. All the three tahsils have been formed into Sub-Divisions—Samrala and Jagraon in 1961 and Ludhiana in 1965—and are under the administrative control of the respective Sub-Divisional Officers.

The tahsilwise list of police stations and police posts is given on pages 467-68 of Chapter XII, 'Law and Order and Justice'.

(b) TOPOGRAPHY

Ludhiana district is centrally located in the Punjab plain region. The Punjab plain is the product of the depositional work of the rivers Satluj, Beas and Ravi. This plain is marked for its flatness and featurelessness. However, a microscopic study reveals considerable intra-regional physiographic diversity to which the district is no exception.

The topography of the district is a typical representative of an alluvial plain and it owes its origin to the aggravational work of the Satluj. The alluvium deposited by this river has been worked over by the wind, giving rise to a number of small sand dunes and sand mounds in this otherwise level area. The summer monsoons with their south-westerly direction have played an important role in determining the direction of these sand dunes which mostly run in south-west north-east direction.

In the Ludhiana plain, the elevation ranges from about 268 metres in the east to about 216 metres in the west. Thus the lie of the land is from east to west at a gentle gradient of about 2 feet in a mile. Some notable heights in the district are Machhiwara (264 metres), Samrala (265 metres), Khanna (263 metres), Ludhiana (246 metres), Satluj Bridge (242 metres) and Jagraon (233 metres).

For a broad understanding of its relief, the district can be divided into :—

(i) The Floodplain of the Satluj and

(ii) The Upland plain.

(i) **The floodplain of the Satluj.**—The Satluj makes an extensive floodplain along its 96 kilometres course in the north of the district. This floodplain covers an area of about 300 square kilometres, which accounts for about 16 per cent of the total area of the district. It is locally known as the *Bet*. Most of this tract is

between the Satluj and its tributary, the Budha Nala, and runs parallel to the master stream for almost the whole of the length of the district. Of course, the Satluj floodplain does have its extension even south of the Budha Nala.

The floodplain is a lowlying area, has swampy condition in parts and possesses somewhat undulating topography. It is the widest in its eastern half (about 11 kms.) and gradually narrows down towards the west (about 5 kms). The breadth of the floodplain is primarily determined by the distance of the Budha Nala from the Satluj and this distance is more in the east than in the west.

Prior to the construction of the Bhakra Dam over the Satluj (in 1952) and the opening of the Nangal Hydel Channel and the network of canals in 1954, the whole of the plain was flooded by the river during the rainy season. It rendered much land uncultivable and much more uninhabitable. However, it gave rise to many interesting physiographic features. Swamps are quite common and pools of stagnant water are found here and there. There are many sinuous abandoned channels and the confluence of Budha Nala with the Satluj is marked by intense braiding. Another feature of interest is the prevalence of a number of sand bars, particularly to the north and northwest of Ludhiana city. Throughout this tract, linear and ox-bow lakes are commonly found in places where the river has abandoned its original course. The damming of the Satluj at Bhakra had a profound effect on its alluviation and erosive power. The floodplain is now practically free from floods, except for a narrow belt of land along the river which is locally known as *Mand* area. The recent years have witnessed an extensive reclamation of cultivable land in the floodplain. Agricultural families have been settled here in large numbers. Groundnut and vegetable cultivation has acquired special significance in view of the fertile sandy loams of this area.

Thus, the floodplain area of the Satluj is further divisible into two parts (i) the *Mand* area, which is inundated by the river in its high water and which has little habitation, and (ii) the flood free floodplain which is being reclaimed for agricultural purposes.

(ii) **The Upland Plain.**—The upland plain is locally known as *Dhaiya.* It accounts for about 84 per cent of the total area of the district. It lies at a general elevation of about 243 metres above the mean sea level and has a gentle slope from the east to the west.

The upland plain is separated from the floodplain by a distinct, though low, scrap which varies in its elevation from 1.5 to 6 metres. In its orientation, this scrap parallels the Budha Nala.

The most distinguishing feature of this upland plain is its characteristic flatness. However, there are a number of small sand dunes and sand mounds, varying in elevation from 1.5 to 9.6 metres and in length from a few metres to about 200 metres, scattered over the area. These sand features provide a variety to the otherwise monotonous flatness of the tract. The sand dunes and sand mounds have mostly alluvial origin and have been later worked over by the wind action. These are primarily the deposited material of the Satluj in its original course which has since been shifted. Their distributional pattern has a correspondence with the former courses of this river. Moreover, these sand dunes have mostly southwest-to-northeast orientation, obviously, in association with the direction of the monsoon winds. The sand dunes find a relatively high concentration along the scrap between the floodplain and upland plain in Jagraon tahsil and near Samrala, Machhiwara, Halwara and Sidhwan.

Thus, the physiographic personality of the district has been fashioned by water and wind. Despite its apparent homogeneity, it is marked by local variations in topography. But one has to work at the micro-regional scale to identify these variations.

(c) RIVER SYSTEM AND WATER RESOURCES

The Satluj and its minor tributary, the Budha Nala, constitute the chief hydrographic features of the district. Besides, there are some stagnant pools of water in the floodplain of the Satluj and a large number of small ponds spread over the whole district. These ponds are found invariably near the settlement.

The river Satluj.—Since the dawn of history, the Satluj is called the river of destiny. There is concrete archaeological evidence to establish that this river has accumulated on its banks layer after layer of civilisation, and played an outstanding role in India's cultural and political history. Some historians and archaeologists held that it was on its banks that Indian civilisation took roots and flourished.

The Satluj is the same as the ancient Vedic river Sutudri which is referred to in the Rig Veda at two places.[4] In the epic period, this river was known as

[4]. In Rig Veda, 10-75-5, which is a hymn in praise of rivers, it is stated : "O Ganga, Yamuna, Saraswati, Sutudri (Satluj), Parushni, river Marudbridha along with Asikni and river Arjikiya along with Vitasta and Sushoma ; Please accept our hymn and hear it".

In Rig. Veda, 3-33-1, it is stated "Rivers Vipas (modern Beas) and Sutudri (modern Satluj) issue forth from the plateau of mountains and are desirous of meeting the ocean. They are forcefully flowing like two mares running away from the stable and competing with each other. They are as white as two cows eager to lick the calf with their tongues ; they are full of waters and with great speed they move forward to meet the oceans".

Satadru, i.e., "one flowing in a hundred channels". The legend of Vashishtha and Viswamitra is stated in the Adiparva of the Mahabharata which incidentally explains the derivation of the word Satadru. In the classical literature, the Satluj is more commonly known as Satadru. Yaska's Nirukta and Bhagavata also refer to the river Satadru. Amarakosha says that Sutudri is the same as Satadru.

The Satluj takes its origin from the Mansarover Lake in the trans-Himalayan region. It is an antecedent stream and is older than the mighty Himalayan ranges. In its course across the high mountain ranges, the river has carved out deep gorges which have only a few parallels in the world. It debouches from the Siwaliks just above Ropar, some 32 kilometres east of the boundary of Samrala tahsil, flows due west along the top of the district for some 96 kilometres and turns as it leaves Jagraon tahsil, slightly to the north towards its junction with Beas at Harike.

During its traverse along the district, the Satluj maintains an east-west direction. Its channel is considerably braided and there are a number of sand islands. The volume of water in the river and the width of the channel fluctuate widely from dry to rainy season. It has been a devastating river during its flooding fury.

The Satluj has experienced a westward drift during recent times. This phenomenon is true of many other rivers constituting the drainage system of North India. It is learnt from local tradition that the Satluj used to flow about two centuries back through a channel near the present scrap between the flood-plain and the upland plain. The old towns and villages of Bahlolpur, Machhiwara, Kum, etc., were built on its banks. The westward drift of the Satluj can be explained through the well-known Ferrel's law according to which things in motion like rivers and winds, tend to drift towards their right in the Northern Hemisphere and left in the Southern Hemisphere.

An event of far reaching importance has been the damming of the Satluj at Bhakra which has checked its flooding menace.

The Budha Nala.—Immediately under the high bank along the old course of the Satluj runs a perennial stream called the Budha Nala which takes its rise near Chamkaur, in Ropar district, and enters the district near Bahlolpur. It runs parallel to the Satluj on its south for a fairly large section of its course in the district and ultimately joins the Satluj at Gorsian Kadar Baksh, in the north-western corner of the district.

The Budha Nala has a sinuous course and the width of the channel varies from place to place. It is a flooding stream during the rainy season but in the dry season it can be crossed on foot at certain points. Its water is quite clear and

is used for a number of purposes. Machhiwara and Ludhiana are situated to the south of the Budha Nala.

Lakes and Ponds.—A large number of pools of water are found in the intervening tract of the Satluj and the Budha Nala. Some of these have a linear shape and have a length of about 2-3 kilometres in each case. These waterbodies are the remnants of the abandoned channels of the major stream. Also, a number of ox-bow lakes are found in the abandoned courses of the Satluj.

The ponds which are sporadically distributed over the whole of the upland plain are local depressions filled with rainwater ; they are used for bathing the cattle, and for providing drinking-water to them.

Underground water resources.—The irrigation in the district is through wells. In the *Bet*, the depth of water below the surface in the wells diminishes from north-east to south-west in Samrala and part of the Ludhiana tahsil. The depth of water in the wells varies a good deal according to locality and season. It is generally 3.65 to 4.57 metres, but in a dry year will fall much lower.

(d) GEOLOGY

There is nothing of geological interest in the district, as it is situated entirely on the alluvium. The district forms a part of the widespread Indo-Gangetic alluvial plain. The area is entirely covered by alluvial deposits which consist of clay and sand with *Kankar*. Locally beds of gravel and cemented sands are occasionally present with the unconsolidated sands. The soils are alkaline in nature. The soils are deficient in nitrogen and organic matter. Within the alluvial tract occur the saline and alkaline soils. In the immediate vicinity of the river is a strip of land liable to annual inundation and called *Mand* or *Kachcha*. The soil of *Mand* is generally a stiff, moist loam of dark colour. Saline efflorescence appears here and there all over the *Bet*. In the neighbourhood of the high bank the surface is uneven and the upper soil is a poor light sand, shifting under every wind, and blown into hillocks. In the half of the district, east of the Malerkotla road, the prevailing soil is a stiff loam of darkish colour, with a good deal of clay in it, while to the west of this road a much larger portion of the area is a light loam or sand.

Economic Minerals.—The only mineral product of the district is *Kankar*, which is quarried in many places, and is to be found in sufficient quantity and at so convenient sites that there is no difficulty in obtaining a supply for all the metalled roads and for lime. Saltpetre used to be made in a few villages, but the manufacture has been stopped under new regulations.

(e) FLORA (Botany)

The district being mainly an agricultural one, vast tracts of land are under cultivation with the result that very little of the natural vegetation is left. Forested land is scarce and only towards Phillaur on the Grand Trunk Road, about 7 kilometres from Ludhiana city, is located the Ludhiana Reserve Forest. The dominant trees in this Reserve Forest are *Dalbergia sissoo* (*shisham*) and *Morus alba* (*Tut*) with one or the other predominating in the different parts of the forest. The Willow, *Salix tetrasperma* (*Baishi*) is found in the lowlying areas. Other trees met with in the forest are *Prosopis spicigera* (*Chhonkar* or *Jand*) (Mesquite), *Acacia nilotica* (*kikar*), *Parkinsonia aculeata* (*Valaiti Kikar*), *Leucaena* and *leucocephala* (*Valaiti banal*) and *Ehria laevis*. The *Phloxdatylifera* (Date-palm) (*Pindkhajur*) has been seen to invade parts of certain compartments in the forest. *Acacia farnesiana* (*Gandh babul*) forms a thick undergrowth in several parts of the forest and in some places has ousted the tree species altogether. The blanks in the forest are covered by *Desmostachya bipinnata* (*dab* grass). This grass sometimes chokes the seedlings of the forest trees and thus interferes with their regeneration. Similarly *Acacia farnesiana* and the *Phlox dactylifera* often interfere with the growth of more useful species in the Reserve Forest.

Among the other woody plants met with in the district outside the Reserve Forest may be mentioned, *Butea monosperma* (*dhak*) which may be seen in hard soil in areas with heavier rainfall, *Capparis decidua* (*karir*), *Acacia nilotica* (*kikar*) and *Zizyphus mauritiana* (*ber*) which are seen on waste ground and in the fields around villages and along roadside. *Ficus religiosa* (*pipal*) and *Ficus benghalensis* (*ber or bargad*) are also commonly seen near villages. *Tamarix articulata* (*farash*) is a useful tree often planted along cultivated fields. *Dalbergi sissoo* (*shisham*), *Albizia lebbek* (*siris*) and *Ficus* spp. are met with forming fine avenues along trunk roads. *Azadirachta indica* (*nim*) and *Melia azedarach* (*bakain*) are useful as shade giving trees and are commonly seen in many places in the district.

The district is not particularly known for any of its fruit trees though the common fruit trees like Citrus spp. (orange, etc.), *Eriobotrya japonic* (Loquat) and others seem to do well in the area.

Calotropis procera (*ak*) and *Zizyphus nummularia* (*kokanber*) are generally found in the wasteland around most villages. The former is cut for firewood and the latter is used for hedges and also its leaves as fodder.

Among the grasses, *Desmostachya bipinnata* (*dab* grass) is abundant and is useful for making mats. *Saccharum spontaneum* (*kahi*) finds use as fodder and is also considered a good sand binder. *Saccharum bengalense* (*sarkanda, sarwar*) is used in many ways. This grass is particularly found to be useful for cultivation in inferior sandy soils. It is used for thatching purposes and for providing

raw meterial to the *ban* making industry in the district. *Cynodon dactylon* Pers. (*khabbal*) is relished by cattle throughout the tract.

Among other useful plants of the district may be mentioned *Typha elephantina* Roxb. (*dibh*). Its popular name is 'Elephant Grass'. It is used for thatching and mat-making industry. This monocotylidonous plant is found in the water-logged areas, along the canals and railway strips.

(f) FAUNA (Zoology)

The district, being a predominantly agricultural and heavily populated area, can boast of very little natural vegetation and forested land. As a result of increasing emphasis on intensive cultivation of available land and bringing more and more areas under the plough, even such pockets as may be described the habitat or sanctuary for wild life have been eliminated during recent years. Even such birds and animals as were found in abundance in the district some 40-50 years ago may, therefore, be said to have greatly diminished during the last few decades. Sport or small game in a very restricted form is available along the river bank or in certain areas which have not been cultivated on account of the seasonal overflow of water from the river. Such stretches of land are covered with thick growth of reeds and bushes. Only such wild life is possible in these areas, which may be considered comparatively safe for birds and animals, as can subsist there.

In the cold weather, wild fowl (*Kulan*) are plentiful along the river and the Budha Nala. Good snipe shooting is possible in the watershed around Machhiwara, where flocks of water-fowls collect for roosting. In the uplands, good many hares and small game, such as partridges, black and grey, are found in sugarcane fields and small patches of jungle. Quails are plentiful in their seasons. Various types of sandgrouse may be met with in cold weather amongst fields of *Moth*, etc. Wild pigeon is found all over the country side. Peacocks are a common sight in all parts of the district and may be seen both in the fields and on house-tops. Their number has generally remained steady because the bird is not killed for game by overwhelming numbers of the people. In some of the detached villages, which still have some growth of jungle left, it is possible to get good bag of small game. The *Birs* or forest plantations which served as game preserves have also shrunk in size.

The wild boars, which were a menace to the villages, have also gone down in numbers as a result of the rapid increase in population and very limited areas left uncultivated. The antelope and the ravine deer which were quite common a few years ago are fast disappearing. Even otherwise shooting wild game in the open country, when very large number of people are always working in the fields, is not free from risk. Hunting as such has been limited to very small number of professional *Shikaris* or sportsmen.

Fauna is believed to be a gift of nature. The beasts and birds which were once looked upon as no more than a source of food are desired to be preserved as a part of the fauna. Every species in nature has its own role to play even though the average man may not be able to understand it. Wild life, both animals and birds, are friends of the cultivator. More often than not they protect the crops by preying upon worms and insects which might destroy them. Special steps have been taken to preserve and protect wild life through the Game Warden.[5]

The district is rich in fisheries resources. The Satluj, Budha Nala and canals are the main natural fisheries of the district. The water area, in the form of village ponds and other impoundments available in the district, is also being brought under fish culture.

Detailed lists of zoological types still extant in the district birds, fishes, amphibious snakes, lizards and mammals, etc., are given in the appendices (A-E) at the end of the chapter at pages 24 to 57.

(g) CLIMATE

(i) **Climatic divisions and seasons and their duration**.—The climate of district is characterised by dryness except in the brief monsoon season, a very hot summer and a bracing winter. The cold season is from about the middle of November to the early part of March. The succeeding period up to about the end of June is the hot season. July, August and the first half of September constitute the south-west monsoon. The period from mid-September to about the middle of November may be termed the post-monsoon or transitional period.

(ii) Temperature and humidity

Temperature.— There is a meteorological observatory in the district at Ludhiana and the records of this station may be taken as representative of the meteorological conditions in the district in general. Temperatures increase rapidly after February. June is generally the hottest month with the mean daily maximum temperature at 40.6°C (105.1°F) and the mean daily minimum at 27.2°C (81.0°F). Hot scorching dust-laden winds blow during the summer season and on individual days the day temperature may reach above 45°C (1130°F). Afternoon thundershowers and occasional dust-storms bring welcome relief

5. Action regarding protection and preservation of wild life is taken under "The Panjab Wild Life Preservation Act, 1959" and the rules framed the reunder in pursuance of section 22 of the said Act, *vide* Punjab Government Notification No. 5331-Ft-VI-61/5008, dated 14th September, 1961.

from the heat though only temporarily. With the onset of the monsoon in the district early in July, there is appreciable drop in the day temperatures. But the night temperatures in the monsoon season are nearly as high as in the latter part of summer. On account of the increased moisture in the monsoon air, the weather is quite sultry and uncomfortable even in the monsoon season in between the rains. After about mid-September when the monsoon withdraws, the night temperatures decrease rapidly. But the drop in the day temperature is not so rapid. From about November, however, both the day and night temperatures decrease rapidly till January, which is the coldest month. The mean daily maximum in January is 19.5°C (67.1°F) and the mean daily minimum 6.4°C (43.5°F). During the winter season, in association with passing western disturbances, cold waves affect the district and the minimum temperature drops down below freezing point.

The highest maximum temperature recorded at Ludhiana was 48.3°C (118.9°F) on May 29, 1944. The lowest minimum temperature was 1.7°C (28.9°F) on January 16, 1935.

Humidity :—Relative humidity is generally high during the monsoon season. In the rest of the year humidity is low, the driest part of the year being the summer sea-son.

The following table I gives normals of temperature and relative humidity during different months of year in Ludhiana district :—

सत्यमेव जयते

TABLE I

Normals of Temperature and Relative Humidity

(LUDHIANA)

Month	Mean Daily Maximum Temperature	Mean Daily Minimum Temperature	Highest Maximum Ever recorded		Lowest Minimum over recorded		Relative Humidity Hours (Indian Standard Time)	
	°C	°C	°C	Date	°C	Date	0830 Per cent	1730 Per cent
January ..	19·5	6·4	28·9	1910 January 15	—1·7	1935 January 16	80	52
February ..	22·0	8·6	33·3	1956 February 27	—1·1	1905 February 1	77	48
March ..	28·6	13·6	41·1	1945 March 31	3·9	1945 March 5	62	38
April ..	35·6	19·2	46·1	1941 April 29	8·9	1905 April 4	46	28
May ..	40·3	24·3	48·3	1944 May 29	15·6	1924 May 5	38	22
June ..	40·6	27·2	47·9	1958 June 17	18·3	1952 June 7	50	36
July ..	36·2	26·8	47·8	1881 July 7	18·6	1958 July 21	73	60
August ..	34·9	26·2	44·4	1884 August 6	20·0	1961 August 21	76	64
September ..	34·9	23·8	41·7	1905 September 5	15·6	1940 September 29	73	52
October ..	33·6	17·4	40·0	1941 October 6	9·4	1932 October 31	62	34
November ..	27·7	10·5	35·0	1909 November 4	2·2	1937 November 30	64	34
December ..	21·7	6·7	29·4	1944 December 4	—1·1	1930 December 24	76	47
Annual ..	31·3	17·5	..	..	..	..	65	43

(iii) **Rainfall**.—Records of the rainfall in the district are available for 3 stations only for 95 years. The details of the rainfall at these stations and for the district as a whole are given in tables 2 and 3. The average annual rainfall in the district is 649.9 mm (25.59″). The rainfall in the district increases from the south-west towards the north-east. About 70 per cent of the annual rainfall is received during period from July to September. The rainfall during the period December to March accounts for about 16 per cent of the rainfall. The variation in the annual rainfall in the district from year to year is large. During the 50 year period, 1901 to 1950, the highest annual rainfall in the district amounting to about 198 per cent of the normal, occurred in 1917 while the very next year was the year with the lowest annual rainfall amounting to only 57 per cent of the normal. In the same 50-year period, the rainfall in the district was less than 80 per cent of the normal in 12 years, two consecutive years of such low rainfall occurring thrice. Considering the rainfall at the individual stations, 3 consecutive years of low rainfall occurred once or twice at all the three stations. Even 4 consecutive years of such low rainfall occurred once at Samrala. It will be seen from table 3 that the annual rainfall in the district was between 500 mm and 800 mm (19.69″ and 31.50″) in 31 years out of 50.

On an average, there are 35 rainy days (days with rainfall of 2.5 mm, i.e., 10 cent. or more) in a year in the district. This number varies from 31 at Jagraon to 37 at Samrala.

The heaviest rainfall in 24 hours recorded at any station in the district was 456.4 mm (17.97″) at Jagraon on September 18, 1950.

The following tables II and III give the normals and extremes of rainfall and frequency of annual rainfall in the district :—

TABLE II

Normals and Extremes of Rainfall

Station	No. of years of data		January	February	March	April	May	June	July	August
1	2		3	4	5	6	7	8	9	10
Samrala ..	50	a	30·7	30·5	27·2	14·5	12·9	50·5	205·0	171·2
		b	2·6	2·7	2·0	1·2	1·3	3·4	9·2	7·5
Ludhiana ..	50	a	33·3	36·6	25·9	15·7	12·9	49·3	195·8	162·6
		b	2·4	2·7	1·9	1·3	1·5	3·3	8·7	7·3
Jagraon ..	50	a	25·7	23·9	23·4	16·0	12·5	42·4	149·6	138·7
		b	2·0	2·3	2·0	1·3	1·3	3·1	7·2	6·3
Ludhiana (District) ..		a	29·9	30·3	25·5	15·4	12·8	47·4	183·5	157·5
		b	2·3	2·6	2·0	1·3	1·4	3·3	8·4	7·0

(continued next page).

Station	No. of years of data		September	October	November	December	Annual	Highest annual rainfall as per cent of normal and year*	Lowest annual rainfall as per cent of normal and year*	Heaviest rainfall in 24 hours** Amount (mm.)	Heaviest rainfall in 24 hours** Date
1	2		11	12	13	14	15	16	17	18	19
Samrala ..	50	a	126·0	12·9	2·8	18·5	702·7	187 (1917)	56 (1929)	283·5	1892 September, 6
		b	4·7	0·7	0·4	1·5	37·2	..	.	..	..
Ludhiana ..	50	a	115·8	11·4	3·3	17·5	680·1	205 (1917)	52 (1938)	309·9	1880 July, 4
		b	4·0	0·8	0·4	1·6	35·9	..	..	..	..
Jagraon ..	50	a	105·9	8·6	2·5	17·3	566·5	215 (1950)	43 (1918)	456·4	1950 September, 18
		b	3·6	0·6	0·3	1·4	31·4	..	..	..	..
Ludhiana (District)		a	115·9	11·0	2·9	17·8	649·9	198 (1917)	57 (1918)	..	..
		b	4·1	0·7	0·4	1·5	35·0	..	..	..	..

(a) Normal rainfall in millimetres.
(b) Average number of rainy days (days with rain of 2.5 mm. or more).
*Years given in brackets.
**Based on all available data up to 1961.

TABLE III

Frequency of Annual Rainfall in the District

(*Data* 1901—1950)

Range in mm.		No. of years	Range in mm.	No. of years
1		2	3	4
301—400	..	5	801—900	3
401—500	..	6	901—1000	1
501—600	..	13	1001—1100	3
601—700	..	8	1101—1200	0
701—800	..	10	1201—1300	1

(iv) **Atmospheric pressure and winds.**

Cloudiness.—During the monsoon season and for spells of a day or two in association with passing western disturbances, the skies are moderately to heavily clouded and overcast occasionally. During the rest of the year, skies are mostly clear or lightly clouded.

Winds.—Winds are generally light in the district. In the south-west, monsoon season winds from directions between north-east and south-east are common but on many days, particularly in the afternoon, westerly or north-westerly winds also blow. In the rest of the year, westerly to north-westerly winds predominate except in the latter half of the summer season when easterlies and south-easterlies blow on some days.

Special weather phenomena.—During the cold season, western disturbances affect the weather over the district. Thunder-storms occur in association with these. Thunder-storms also occur during the summer and to a lesser extent in the monsoon season. Dust-storms affect the district during the summer season.

The following tables IV and V give mean wind speed and special weather phenomena, respectively, for the district :—

TABLE IV

Mean Wind Speed in Km./hr.

(LUDHIANA)

January	February	March	April	May	June	July	August	September	October	November	December	Annual
2·3	2·7	3·2	3·4	3·7	4·0	3·4	2·6	2·1	1·6	1·4	1·6	2·7

TABLE V

Special Weather Phenomena

(LUDHIANA)

Mean No. of days with	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Thunder ..	0·1	0·2	0·4	1·1	1·6	1·0	1·6	0·4	0·9	0·2	0·1	0·2	7·8
Hail ..	0·0	0·2	0·0	0·1	0·1	0·0	0·0	0·0	0·3	0·0	0·0	0·0	0·7
Dust-storm ..	0·0	0·1	0·1	0·8	1·6	1·4	0·7	0·1	0·0	0·4	0·0	0·0	5·2
Squall ..	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·1	0·0	0·0	0·0	0·0	0·1
Fog ..	1·4	0·4	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·4	2·2

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APPENDICES

(A to E)

APPENDIX A

LIST OF BIRDS FOUND IN LUDHIANA DISTRICT

CLASS : Aves

SUB-CLASS : *Neornithes*

Serial No.	Order	Family	Zoological Name	Popular Name	Local Name	Remarks
1	2	3	4	5	6	7
1	Podicipediformes	Podicipedidae	*Podiceps caspicus caspicus* (Hablizl)	Blacknecked Grebe	*Pan dubi*	Winters uncommonly
2	Do	Do	*P. ruficollis capensis* Salvadori	Little Grebe	*Dub dubi*	A year round resident from plains to 6,000 feet on lakes and tanks
3	Palecaniformes	Phalacrocoracidae	*Phalacrocorax carbo sinensis* (Shaw)	Cormorant	*Pan kawa*	On large bodies of water
4	Do	Do	*P. fuscicollis* Stephens	Indian Shag	*Jalkan*	
5	Do	Do	*P. niger* (Vieillot)	Little or Pygmy Cormorant	*Nikka Jalkan*	Breeds on suitable lakes and tanks
6	Do	Do	*Anhinga rufa melanogaster* Pennant	Darter	*Jalkani*	
7	Do	Fregatidae	..	..	..	
8	Ciconiiformes ..	Ardeidae	*Ardea imperialis* Baker	Great white bellied Heron	*Safed bagla*	Near large swamps, lakes or rivers. Doubtful
9	Do	Do	*A. cinerea rectirostris* Gould	Grey Heron	*Grey bagla*	Resident bird. Breeds from plains level to 5,000 feet

10	Do	Do	*A. purpurea manilensis* Meyen	Purple Heron	*Gulabi bagla*	Breeds in low lands in reedy swamps and lakes
11	Do	Do	*Ardeola grayii* (Sykes)	Pond Heron or Paddy bird	*Chini bagla*	Low lying wet areas
12	Do	Do	*Bubulcus ibis coromandus* (Boddaert)	Cattle Egret	*Surkhia bagla*	In pastures and wet areas
13	Do	Do	*Egretta alba alba* (Linnaeus)	Large Egret	*Barra Karchia bagla*	Straggler
14	Do	Do	*Egretta alba modesta* (J.E. Gray)	Large Egret	*Barra Karchia bagla*	In swampy areas
15	Do	Do	*E. garzetta garzetta* (Linnaeus)	Little Egret	*Karchia bagla*	In plains near lakes and ponds
16	Do	Do	*Nycticorax nycticorax nycticorax* (Linnaeus)	Night Heron	*Kokrai*	Near cultivation or habitation
17	Do	Do	*Ixobrychus minutus minutus* (Linnaeus)	Little Brittern	*Harial bagla*	Resident bird, in swamps and marshy reed beds
18	Do	Do	*Botaurus stellaris stellaris* (Linnaeus)	Bittern	*Kancha bagla*	Migrant and doubtful
19	Do	Ciconiidae	*Ibis leucocephalus* (Pennant)	Painted stork	*Chittir mittra Lamting*	Larger marshy areas of lakes
20	Do	Do	*Anastomus oscitans* (Boddaert)	Open bill stork	*Khuli Chunj Saras*	Around tanks, lakes and large streams
21	Do	Do	*Ciconia episcopus episcopus* (Boddaert)	White necked stork	*Chitti Gardan Saras*	In moist areas at tanks and rivers
22	Do	Do	*C. ciconia ciconia* (Linnaeus)	White stork	*Chitta Lamting*	Doubtful in winters, migrant
						Fields and low lying paddy areas and tanks
23	Do	Do	*C. nigra* (Linnaeus)	Black stork	*Kala Saras*	In moist fields along rivers or near tanks

Serial No.	Order	Family	Zoological Name	Popular Name	Local Name	Remarks
1	2	3	4	5	6	7
24	Ciconiiformes *contd.*	Ciconiidae *contd.*	*Xenorhynchus asiaticus asiaticus* (Latham)	Blacknecked stork	*Kali Gardan Saras*	Swampy areas about larger lakes and rivers
25	Do	Threskiornithida	*Threskiornis melanocephala* (Latham)	White Ibis	*Sufed baza*	On lakes and tanks
26	Do	Do	*Pseudibis papillosa papillosa* (Temminck)	Black Ibis	*Kala baza*	Stubble field (field with grains left in the field after reaping), near lakes, tanks or large water
27	Do	Do	*Platalea leucoradia major* (Temminck and Schlegel)	Spoon bill	*Chamcha or Chamcha baza*	Extremely doubtful and locally vagrant
28	Do	Phoenicopteridae	*Phoenicopterus roseus* Pallas	Flamingo	*Raj-hans*	Rare vagrant and extremely doubtful
29	Anseriformes	Anatidae	*Anser fabalis rossicus* Buturlin	Tundra Bean Goose	*Birva-hans*	Doubtful occurrence. "May turn up in winter in Northern India" (Ripley, 1961)
30	Do	Do	*Anser fabalis brachyrhynchus* Baillon	Pink footed Goose	*Lal Pag Mag*	Rare, migrant
31	Do	Do	*Anser anser rubrirostris* Swinhoe	Greyleg Goose	*Mag*	Rare
32	Do	Do	*A. indicus* (Latham)	Barheaded Goose	*Mag karba hans*	Winter
33	Do	Do	*Cygnus cygnus* (Linnaeus)	Whooper Swan	*Hans*	Doubtful winter straggler
34	Do	Do	*C. olor* (Gmelin)	Mute Swan	*Hans*	Doubtful winter straggler

35	Do	Do	*Dendrocygna javanica* (Horsfield)	Lesser Whistling Teal, Tree Duck	*Murghabi*	On large swamps, lakes and tanks
36	Do	Do	*D. bicolor* (Vieillot)	Large whistling Teal	*Murghabi*	
37	Do	Do	*Tadorna ferruginea* (Pallas)	Ruddy sheld-duck, Brahminy Duck	*Surkhab*	Large lakes and rivers
38	Do	Do	*T. tadorna* (Linnaeus)	Common shed-duck	*Surkhab* (*Chhota Chark*)	Wintering species
39	Do	Do	*Anas angustirostris* Menetries	Marbled Teal	*Chhoti murgabi*	
40	Do	Do	*A. acuta* Linnaeus	Pintail	*Murgabi Seekh mar*	Winter lakes, tanks and rivers
41	Do	Do	*A. crecca crecca* Linnaeus	Common Teal	*Kerra*	Winter
42	Do	Do	*A. formosa* Georgi	Baikal or Clucking Teal, Formosa Teal	*Baikal*	Vagrant
43	Do	Do	*A. poecilorhyncha poecilorhyncha* Forster	Spotbill Duck	*Gurgal murghabi*	Doubtful in winter
44	Do	Do	*A. platyrhynchos* Linnaeus	Mallard	*Neelsar*	Winter
45	Do	Do	*A. strepera strepera* Linnaeus	Gadwall	*Targosh*	Winter
46	Do	Do	*Anas falcata* Georgi	Falcated Teal	*Sili murghabi*	
47	Do	Do	*A. penelope* Linnaeus	Wigeon	*Chhota lal sir*	On large lakes and tanks
48	Do	Do	*A. querquedula* Linnaeus	Garganey	*Khira*	Winter, on large lakes and tanks
49	Do	Do	*A. clypeata* Linnaeus	Shoveller	*Gheerah*	Commonly wintering

Serial No.	Order	Family	Zoological Name	Popular Name	Local Name	Remarks
1	2	3	4	5	6	7
50	Anseriformes *contd.*	Anatidae *contd.*	*Netta rufina* (Pallas)	Redcrested Pochard	*Lal sir*	Doubtful, on reedy lakes
51	Do	Do	*Aythya ferina* (Linnaeus)	Common Pochard	*Lal sir*	On lakes and tanks
52	Do	Do	*A. nyroca* (Guldenstadt)	White-eyed Pochard	*Bugar murghai*	Doubtful, on large ponds and lakes, rarely on rivers
53	Do	Do	*A. fuligula* (Linnaeus)	Tufted Duck	*Duharu*	Winter
54	Do	Do	*Nettapus coromandelianus coromandelianus* (Gmelin)	Cotton Teal or Quacky-duck	*Girria*	Resident in suitable tanks and ponds
55	Do	Do	*Sarkidiornis melanotos melanotos* (Pennant)	Nukhta, Comb Duck	*Nukta murghabi*	Doubtful, in winter
56	Do	Do	*Bucephala clangula clangula* (Linnaeus)	Golden-eye Duck	*Sunahri-Akh murghabi*	Vagrant
57	Do	Do	*Mergus albellus* Linnaeus	Smew	*Smew*	Winter visitant
58	Do	Do	*Mergus merganser merganser* Linnaeus	Goosander, Common Merganser	*Hans*	Doubtful, winter visitant
59	Do	Do	*Oxyura leucocephala* (Scopoli)	White-headed stiff-tailed Duck	*Murghabi*	Winter vagrant
60	Falconiformes	Accipitridae	*Elanus caeruleus vociferus* (Latham)	Black-winged Kite	*Kapassi, Cheel* (*Illar*)	Subtropical forest and cultivated areas

61	Do	Do	*Pernis ptilorhyncus orientalis* Taczanowski	Honey Buzzard	*Teesa*	May occur
62	Do	Do	*P. p. ruficollis* Lesson	Do	*Teesa*	Semi evergreen and deciduous wooded country
63	Do	Do	*Milvus migrans migrans* (Boddaert)	Pariah or Black Kite	*Cheel*	Winter vagrant
64	Do	Do	*Milvus migrans govinda* Sykes	Do	*Cheel*	Open country or near habitation
65	Do	Do	*Milvus migrans lineatus* (Gray)	Blackered or Large Indian Kite	*Cheel*	Doubtful, during winter
66	Do	Do	*Haliastur indus indus* (Boddaert)	Brahminy Kite	*Dhobia cheel*	Near water in open country
67	Do	Do	*Accipiter badius cenchroides* (Severtzov)	Shikra	*Shikra*	In thorn and dry forest
68	Do	Do	*A. b. dussumieri* (Temminck)	Do	*Shikra*	Cultivated open country or tree groves
69	Do	Do	*A. nisus nisosimilis* (Tickell)	Sparrow Hawk	*Basha*	Doubtful occurrence, wintering
70	Do	Do	*Buteo rufinus rufinus* (Cretzschmar)	Long-legged Buzzard	*Bara baz*	Winter wandering
71	Do	Do	*B. vulpinus vulpinus* (Gloger)	Desert Buzzard	*Baz*	Winter
72	Do	Do	*Butastur teesa* (Franklin)	White-eyed Buzzard Eagle	*Teesa*	
73	Do	Do	*Spizaetus nipalensis nipalensis* (Hodgson)	Hodgson's Hawk Eagle	*Cheel*	Straggles to plains in winter
74	Do	Do	*Aquila heliaca heliaca* Savigny	Imperial Eagle	*Shah baz*	Doubtful occurrence, winters
75	Do	Do	*A. clanga* Pallas	Greater Spotted Eagle	*Okab*	Doubtful occurrence, winters

Serial No.	Order	Family	Zoological Name	Popular Name	Local Name	Remarks
1	2	3	4	5	6	7
76	Falconiformes *contd.*	Accipitridae *contd.*	*A. pomarina hastata* (Lesson)	Lesser Spotted Eagle	*Sampmer*	
77	Do	Do	*Icthyophaga ichthyaetus ichthyaetus* (Horsfield)	Greyheaded Fishing Eagle	*Machh manga*	Near rivers and tanks in woods
78	Do	Do	*Torgos calvus* (Scopoli)	Black or Pondicherry Vulture	*Raj gidh*	In open cultivated areas
79	Do	Do	*Gyps fulvus fulvescens* Hume	Griffon Vulture	*Griffon gidh*	In open cultivated areas
80	Do	Do	*G. bengalensis* (Gmelin)	Indian White-backed Vulture	*Gidh*	
81	Do	Do	*Neophron percnopterus percnopterus* Linnaeus	Egyptian or Scavenger Vulture	*Sufed gidh*	
82	Do	Do	*N. p. ginginianus* (Latham)	Do	*Sufed gidh*	In dry open, inhabited country
83	Do	Do	*Circus cyaneus cyaneus* (Linnaeus)	Hen-Harrier	*Murghi mar*	
84	Do	Do	*C. macrourus* (S.G. Gmelin)	Pale Harrier	*Girgat mar*	Winters
85	Do	Do	*C. melanoleucos* (Pennant)	Pied Harrier	*Dastmal*	Winter visitant
86	Do	Do	*C. aeruginosus aeruginosus* (Linnaeus)	Marsh Harrier	*Dastmal*	Winter

87	Do	Do	*Circaetus gallicus gallicus* (Gmelin)	Short-toed Eagle	*Samp mar*	Deciduous scrub and tropical thorn forest
88	Do	Do	*Spilornis cheela cheela* (Latham)	Crested serpent Eagle	*Dogra cheel*	Winters only
89	Do	Do	*Pandion haliaetus haliaetus* (Linnaeus)	Osprey	*Machhi mar*	Doubtful occurrence, winters
90	Do	Falconidae	*Falco biarmicus cherrug* J. E. Gray	Lanner Falcon or Saker or Cherrug Falcon	*Laggar*	Winter visitant
91	Do	Do	*F. b. jugger* J. E. Gray	Lagger Falcon	*Laggar*	Resident
92	Do	Do	*F. peregrinus japonesis* Gmelin	Lagger Falcon, Peregrine Falcon	*Laggar*	Winter migrant
93	Do	Do	*F. p. peregrinator* Sundevall	Shahin Falcon	*Shahin laggar*	Breeding
94	Do	Do	*F. subbuteo centralasiae* (Buturlin)	Hobby	*Haaby*	Doubtful occurrence, wintering
95	Do	Do	*F. columbarius insignis* (Clark)	Merlin	*Turumti*	Winter migrant
96	Galliformes ..	Phasianidae	*Francolinus francolinus asiae* Bonaparte	Black Partridge	*Kala titar*	
97	Do	Do	*F. pondicerianus interpositus* Hartert	Grey Partridge	*Titar*	Thorny and dry forest
98	Do	Do	*Coturnix coturnix coturnix* (Linnaeus)	Common Quail	*Bater*	Migrant in winter
99	Do	Do	*C. coromandelica* (Gmelin)	Black-breasted or Rain Quail	*China bater*	In dry thorn scrub, grass-lands or cultivated crop
100	Do	Do	*C. chinensis chinensis* (Linnaeus)	Blue-breasted Quail	*Nila bater*	Becoming uncommon
101	Do	Do	*Perdicula asiatica punjaubi* Whistler	Jungle Bush Quail	*Lowwa bater*	Plains to 4,000 feet in open scrub country

Serial No.	Order	Family	Zoological Name	Popular Name	Local Name	Remarks
1	2	3	4	5	6	7
102	Galliformes *contd.*	Phasianidae *contd.*	*P. argoondah meinertzhageni* Whistler	Rock Bush Quail	*Lowwa bater*	In open, stony country
103	Do	Do	*Pavo cristatus* Linnaeus	Peacock or Common Peafowl	*Mor*	National Bird
104	Gruiformes ..	Turnicidae	*Turnix sylvatica dussumier* (Temminck)	Little Bustard Quail	*Bater*	In scrub jungle and near cultivation
105	Do	Do	*T. tanki tanki* Blyth	Button Quail	*Lowwa bater*	In scrub and grassland
106	Do	Gruidae	*Grus grus lilfordi* Sharpe	Common Crane	*Koonj*	Migrant
107	Do	Do	*G. leucogeranus* Pallas	Siberian or Great White Crane	*Koonj*	Scarce, winter visitant
108	Do	Rallidae	*Rallus aquaticus korejewi* Zarudny	Water Rail	..	Winter straggler
109	Do	Do	*R. striatus albiventer* Swainson	Blue-breasted Banded Rail	*Neela rail*	In swamps and village ponds
110	Do	Do	*Porzana pusilla pusilla* (Pallas)	Baillon's Crake	..	Winters
111	Do	Do	*Amaurornis phoenicurus chinensis* (Boddaert)	White-Breasted Waterhen	*Jal murghi*	In paddy fields and swampy tracts
112	Do	Do	*Gallinula chloropus indica* Blyth	Moorhen	*Jal murghi*	Near Water
113	Do	Do	*Porphyrio porphyrio policephalus* (Latham)	Purple Moorhen	*Kaim*	In swampy areas

114	Do	Do	*Fulica atra atra* Linnaeus	Coot	*Khurkul*	In large areas of water and swamp
115	Do	Otididae	*Choriotis nigriceps* (Vigors)	Great Indian Bustard	*Tugdar*	Now rare and decreasing
116	Do	Do	*Chalamydotis undulata macqueenii* (J. E. Gray)	Houbara	*Obara*	Doubtful occurrence
117	Charadriiformes	Jacanidae	*Hydrophasianus chirurgus* (Scopoli)	Pheasant-tailed Jacana	*Pihu*	Near tanks and swamps
118	Do	Do	*Metopidius indicus* (Latham)	Bronze-winged Jacana	Do	Do
119	Do	Charadriidae	*Vanellus gregarius* (Pallas)	Sociable Lapwing	*Titiri*	Irregular winter visitant
120	Do	Do	*Venellus vanellus* (Linnaeus)	Lapwing, Peewit	Do	Wintering (Doubtful)
121	Do	Do	*V. indicus indicus* (Boddaert)	Red wattled Lapwing	Do	Semi-cultivation near water
122	Do	Do	*V. spinosus duvaucelii* (Lesson)	Spurwinged Lap-wing	Do	Sandy banks near water
123	Do	Do	*V. malabaricus* (Boddaert)	Yellow wattled Lapwing	*Zirdi*	Semi-cultivation or abandoned paddy
124	Do	Do	*Numenius arquata arquata* (Linnaeus)	Curlew	*Bara Gulinda*	Winter
125	Do	Do	*Limosa limosa limosa* (Linnaeus)	Black-tailed Godwit	*Gudera*	
126	Do	Do	*Tringa erythropus* (Pallas)	Spotted or Dusky Red-shank	*Chitra battan*	Doubtful occurrence, winters
127	Do	Do	*T. totanus eurhinus* (Oberholser)	Common Red-shank	*Chota battan*	Doubtful occurrence, winters
128	Do	Do	*T. stagnatilis* (Bechstein)	Marsh Sand-piper	*Chupka*	Doubtful occurrence, winter migrant

Serial No.	Order	Family	Zoological Name	Popular Name	Local Name	Remarks
1	2	3	4	5	6	7
129	Charadriiformes *contd.*	Charadriidae *contd.*	*Tringa nebularia* (Gennerus)	Green-shank	..	Winter migrant
130	Do	Do	*T. occhropus* Linnaeus	Green Sand-piper	*chupka*	Near ponds, rivers and swamps in winter
131	Do	Do	*T. glareola* Linnaeus	Wood Sand-piper	*Chupka*	Doubtful occurrence, winter migrant
132	Do	Do	*T. hypoleucos hypoleucos* Linnaeus	Common sand-piper	*Chupka*	Near water in winter
133	Do	Do	*Capalla nemoricola* (Hodgson)	Wood Snipe	*Chobaka*	Winter migrant
134	Do	Do	*C. stenura* (Bonaparte)	Pintail Snipe	*Seekh chaha*	Winter migrant
135	Do	Do	*C. gallinago gallinago* (Linnaeus)	Fantail Snipe	*Chaha*	Winter migrant
136	Do	Do	*Calidris temminckii* (Leisler)	Temminck's Stint	..	In winters along the large bodies of water
137	Do	Rostratulidae	*Rostratula benghalensis benghalensis* (Linnaeus)	Painted Snipe	*Kajchaha*	In swampy places
138	Do	Recurvirostridae	*Himantopus himantopus himantopus* (Linnaeus)	Blackwinged Stilt	*Tinghur*	Doubtful occurrence
139	Do	Burhinidae	*Burhinus oedicnemus saharae* (Reichenow)	Stone Curlew	*Barsiri*	
140	Do	Glareolidae	*Cursorius coromandelicus* (Gmelin)	Indian Courser	*Nukri*	

141	Do	Laridae	*Chlidonias hydrida indica* (Stephens)	Whiskered Tern	*Koori*	
142	Do	Do	*Gelochelidon nilotica nilotica* (Gmelin)	Gullbilled Tern	*Dhomra koori*	
143	Do	Do	*Sterna aurantia* J. E. Gray	Indian River Tern	*Koori*	Winters
144	Do	Do	*S. acuticauda* J. E. Gray	Black-bellied Tern	*Kal koori*	
145	Do	Do	*S. albifrons pusilla* Temminck.	Little Tern	*Chhoti koori*	
146	Columbiformes ...	Pteroclididae	*Pterocles alchata caudacutus* (S. G. Gmelin)	Large Pintail Sand-grouse	*Bhattitar*	
147	Do	Do	*P. exustus erlangeri* (Neumann)	Indian Sand-grouse	*Bhattitar*	Newly ploughed fields
148	Do	Do	*P. indicus indicus* (Gmelin)	Close-barred or Painted Sand-grouse	*Bhattitar*	
149	Do	Columbidae	*Treron phoenicoptera chlorigaster* (Blyth)	Green Pigeon	*Harial*	
150	Do	Do	*Columba livia neglecta* Hume	Blue Rock Pigeon	*Kabutar*	
151	Do	Do	*C. eversmanni* Bonaparte	Eastern Stock Pigeon	*Salara*	Doubtful occurrence in open cultivated fields
152	Do	Do	*C. palumbus casiotis* (Bonaparte)	Wood Pigeon, Ring Dove or Cushat	*Kamlowa*	Doubtful migrant
153	Do	Do	*Streptopelia orientalis meena* (Sykes)	Rufous Turtle Dove	*Kamlowa*	In winters
154	Do	Do	*S. decaocto decaocto* (Frivaldszky)	Indian Ring Dove or Collared Turtle Dove	*Dhor fakhta*	

Serial No.	Order	Family	Zoological Name	Popular Name	Local Name	Remarks
1	2	3	4	5	6	7
155	Columbiformes *contd.*	Columbidae *contd.*	*S. tranquebarica tranquebarica* (Hermann)	Red Turtle Dove	*Seroti fakhta*	Doubtful occurrence
156	Do	Do	*S. chinensis suratensis* (Gmelin)	Spotted Dove	*Chitroka fakhta*	Doubtful occurrence
157	Do	Do	*S. senegalensis cambayensis* (Gmelin)	Little Brown Dove or Senegal Dove	*Chhota fakhta*	
158	Columbiformes	Columbidae	*Chalcophaps indica indica* (Linnaeus)	Emerald Green-winged or Bronze-winged Dove	*Kamlowa*	
159	Psittaciformes	Psittacidae	*Psittacula eupatria nipalensis* (Hodgson)	Large Indian or Alexandrine Parakeet	*Kai tota*	In well wooded country and cultivation
160	Do	Do	*P. krameri borealis* (Neumann)	Rose-ringed Parakeet	*Libar tota*	
161	Do	Do	*P. cyanocephala bengalensis* (Forster)	Blossom-headed Parakeet	*Tuia tota*	
162	Cuculiformes	Cuculidae	*Clamator jacobinus serratus* (Sparrman)	Pied Crested Cuckoo	*Chatak*	Probable winter migrant
163	Do	Do	*Cuculus sparverioides sparverioides* Vigors	Large Hawk-Cuckoo	*Barri papiha*	Probable winter migrant
164	Do	Do	*C. varius varius* Vahl	Common Hawk Cuckoo or Brain-fever Bird	*Papiha*	
165	Do	Do	*C. micropterus micropterus* Gould	Indian Cuckoo	*Papiha*	

166	Do	Do	*C. canorus canorus* Linnaeus	The Cuckoo	*Papiha*	
167	Do	Do	*C. saturatus saturatus* Blyth	Himalayan Cuckoo	*Pahari papiha*	
168	Do	Do	*C. poliocephalus poliocephalus* Latham	Small Cuckoo	*Papiha*	Winters
169	Do	Do	*Eudynamys scolopacea scolopacea* (Linnaeus)	Koel	*Koel*	
170	Do	Do	*Centropus sinensis sinensis* (Stephens)	Crow Pheasant or Coucal	*Kuka*	
171	Strigiformes ..	Strigidae	*Tyto alba stertens* Hartert	Barn Owl	*Jangli chogad*	
172	Do	Do	*Otus bakkamoena gangeticus* Ticehurst	Collared Scope Owl	*Tharkavi chogad*	
173	Do	Do	*Bubo bubo bengalensis* (Franklin)	Eagle Owl, Great Horned Owl	*Ghugoo*	
174	Do	Do	*B. coromandus coromandus* (Latham)	Dusky Horned Owl	*Ghugoo*	
175	Do	Do	*B. zeylonensis leschenault* (Temminck)	Brown Fish Owl	*Ulloo*	
176	Do	Do	*Athene brama indica* (Franklin)	Spotted Owlet	*Khusattia*	
177	Do	Do	*Asio otus otus* (Linnaeus)	Long-eared Owl	*Vadkan ulloo*	
178	Do	Do	*A. flammeus flammeus* (Pontoppidan)	Short-eared Owl	*Chhutkan ulloo*	
179	Caprimulgiformes	Caprimulgidae	*Caprimulgus asiaticus asiaticus* Latham	Common Indian Night-jar	*Chipak*	
180	Do	Do	*C. affinis monticolus* Franklin	Franklin's or Allied Night-jar	*Dabehri*	

Serial No.	Order	Family.	Zoological Name	Popular Name	Local Name	Remarks
1	2	3	4	5	6	7
181	Apodiformes ..	Apodidae	*Collocalia brevirostris brevirostris* (McClelland)	Indian Edible-Nest Swiftlet		
182	Do	Do	*Apus melba nubifuga* Koelz	Alpine Swift	*Bara batasi*	
183	Do	Do	*A. affinis affinis* (J. E. Gray)	House Swift	*Babila*	
184	Coraciiformes ..	Alcedinidae	*Ceryle rudis leucomelanura* Reichenbach	Lesser Pied King-fisher	*Koryala kilkila*	
185	Do	Do	*Alcedo atthis pallasii* Reichenbach	Common King-fisher	*Chota kilkila*	
186	Do	Meropidae	*Merops apiaster* Linnaeus	European Bee-eater	*Bara patringa*	
187	Do	Do	*M. orientalis orientalis* Latham	Green Bee-eater	*Patringa*	
188	Do	Coraciidae	*Coracias benghalensis benghalensis* (Linnaeus)	Indian Roller or Blue Jay	*Nilkant*	
189	Do	Upupidae	*Upupa epops epops* Linnaeus	Hoopoe, Hudhud	*Hud Hud*	
190	Do	Bucerotidae	*Tockus birostris* (Scopoli)	Common Grey Horn-bill	*Dhanesh*	
191	Piciformes ..	Capitonidae	*Megalaima zeylanica caniceps* (Franklin)	Green Barbet	*Hara bansantha*	
192	Do	Do	*M. asiatica asiatica* (Latham).	Blue-throated Barbet	*Nilkant basantha*	

193	Do	Picidae	*Picus xanthopygaeus* (J.E. and G.R. Gray)	Little Scaly-bellied Green Woodpecker	. *Lakarkut*	
194	Do	Do	*Dinopium benghalense benghalense* (Linnaeus)	Lesser Golden-backed Woodpecker	*Katphora*	
195	Passeriformes ..	Pittidae	*Pitta brachyura brachyura* (Linnaeus)	Indian Pitta	*Naozang*	
196	Do	Alaudidae	*Mirafra javanica cantillans* Blyth	Singing Bush Lark	*Jangli aggiya*	
197	Do	Do	*Mirafra erythroptera sindiana* Ticehurst	Redwinged Bush Lark	*Jangli aggiya*	Doubtful occurrence
198	Do	Do	*Eremopterix nigriceps affinis* (Blyth)	Black crowned Finch-Lark	..	Do
199	Do	Do	*Ammomanes deserti phoenicuroides* (Blyth)	Desert Finch-Lark	*Aggiya*	
200	Do	Do	*Calandrella cinerea longipennis* (Eversmann)	Short-toed Lark	*Chhota aggiya*	
201	Do	Do	*C. c. dukhunensis* (Skyes)	Short-toed Lark	*Chhota aggiya*	
202	Do	Do	*C. acutirostris acutriostris* Hume	Hume's Short-toed Lark	*Chhota aggiya*	Winter visitant
203	Do	Do	*C. a. tibetana* Brooks	Do	*Chhota aggiya*	In open dry country
204	Do	Do	*C. raytal raytal* (Blyth)	Sand Lark	*Aggiya*	
205	Do	Do	*Melanocorypha bimaculata torquata* Blyth	Eastern Calandra Lark	*Calander aggiya*	
206	Do	Do	*Galerida cristata chendoola* (Franklin)	Crested Lark	*Chendul*	
207	Do	Do	*Alauda arvensis dulcivox* Brooks.	Skylark	*Bhurnt*	

Serial No.	Order	Family	Zoological Name	Popular Name	Local Name	Remarks
1	2	3	4	5	6	7
208	Passeriformes *contd.*	Alaudidae *contd.*	*A. gulgula inconspicua* Severtzov	Eastern Skylark	*Bhurni*	
209	Do	Hirundinidae	*Riparia riparia diluta* (Sharpe and Wyatt)	Collared Sand Martin	..	
210	Do	Do	*Hirundo smithii filifera* Stephens	Wire-tailed Swallow	*Leishra* .	
211	Do	Do	*Delichon urbica urbica* (Linnaeus)	House Martin	*Aba bil*	
212	Do	Laniidae	*Lanius excubitor lahtors* (Sykes)	Grey Shrike	*Sufed latora*	
213	Do	Do	*L. vittatus vittatus* Valenciennes	Bay-backed Shrike	*Chhota latora*	
214	Do	Do	*L. collurio isabellinus* Hemprich and Ehrenberg	Red-backed Shrike	*Lal latora*	Doubtful occurrence
215	Do	Oriolidae	*Oriolus oriolus kundoo* Sykes	Golden Oriole	*Peelak*	
216	Do	Dicruridae	*Decrurus adsimilis albirictus* (Hodgson)	Black Drongo or King Crow	*Kal kaliji*	
217	Do	Do	*D. leucophaeus longicaudatus* Hay	Grey or Ashy Drongo	*Dhapri*	
218	Do	Sturnidae	*Sturnus malabaricus malabaricus* (Gmelin) .	Grey-headed Myna	*Bhora Myna*	Doubtful occurrence

219	Do	Do	*S. pagodarum* (Gmelin)	Black-headed or.. Brahminy, Myna	*Myna*	
220	Do	Do	*S. roseus* (Linnaeus)	Rosy Pastor	*Tilyer*	Winter Vagrant. Doubtful occurrence
221	Do	Do	*S. vulgaris indicus* Blyth	Starling	*Tilyer*	
222	Do	Do	*S. contra contra* Linnaeus	Pied Myna		
223	Do	Do	*Acridotheres tristis tristis* (Linnaeus) .	Common Myna	*Desi myna*	
224	Do	Do	*A. ginginianus* (Latham)	Bank Myna	*Ganga myna*	
225	Do	Do	*A. fuscus fuscus* (Wagler)	Jungle Myna	*Jangli myna*	
226	Do	Corvidae	*Dendrocitta vagabunda pallida* (Blyth)	Indian Tree Pied		
227	Do	Do	*Corvus splendens splendens* Vieillot	House Crow	*Kowwa*	
228	Do	Do	*C. monedula monedula* Linnaeus	Jackdaw	*Pahari kaan*	
229	Do	Campephagidae	*Tephrodornis pondicerianus pallidus* Ticehurst	Common Wood Shrike	*Jangli kasya*	
230	Do	Do	*Coracina melaschistos melaschistos* (Hodgson)	Smaller Grey Cuckoo Shrike	*Tari ababil*	
231	Do	Do	*Pericrocotus flammeus speciosus* (Latham)	Scarlet Minivet	*Pahari saheli*	Double occurrence
232	Do	Do	*P. cinnamomeus peregrinus* (Linnaeus)	Small Minivet	*Saheli*	
233	Do	Irenidae	*Aegithina nigrolutea* (Marshall)	Marshall's Lora	*Shoubeegi*	

Serial No.	Order	Family	Zoological Name	Popular Name	Local Name	REMARKS
1	2	3	4	5	6	7
234	Passeriformes—*contd.*	Pycnonotidae	*Pycnonotus jocosus pyrrhotis* (Bonaparte)	Red-whiskered-Bulbul	*Pahari bulbul*	
235	Do	Do	*P. leucogenys leucotis* (Gould)	White-cheeked Bulbul	*Bulbul*	
236	Do	Do	*P. cafer humayuni* Deignan	Red-vented Bulbul	*Guldum*	
237	Do	Muscicapidae	*Microura albiventer pallidior* (Kinnear)	Scaly-breasted Wren-Babbler	*Chitri Chilchil*	Doubtful occurrence, winters
238	Do	Do	*Chrysomma sinensis hypoleuca* (Franklin)	Yellow-eyed Babbler	*Bulal chasm*	
239	Do	Do	*Turdoides caudatus caudatus* (Dumont)	Common Babbler	*Chilchil*	
240	Do	Do	*T. malcoemi* (Sykes)	Large Grey Babbler	*Bhaina*	
241	Do	Do	*T. striatus sindianus* (Ticehurst)	Jungle Babbler	*Sat bhain*	
242	Do	Do	*Muscicapa sibirica gulmergi* (Baker)	Sooty Fly-catcher	*Bulbul*	Doubtful occurrence, during winter
243	Do	Do	*M. latirostris* Raffles	Brown Fly-catcher	*Bulbul*	Winters (has been recorded)
244	Do	Do	*M. parva parva* Bechstein	Red-breasted Fly-catcher	*Lal makh chiri*	
245	Do	Do	*Rhipidura albicollis canescens* (Koelz)	White-throated Fantail Fly-catcher	*Nachan*	

246	Do	Do	*Terpsiphone paradisi. leucogaster* (Swainson)	Paradise Fly-catcher	*Shah bulbul*	
247	Do	Do	*Prinia buchanani* Blyth	Rufous fronted Long-tailed Warbler	*Ghas ki phutki*	
248	Do	Do	*P. gracilis lepida* Blyth	Streaked, or Slender, Longtail Warbler	*Ghas ki phutki*	
249	Do	Do	*P. subflava terricolor* (Hume)	Plain, or Tawny-flanked, Longtail Warbler	*Phutki*	
250	Do	Do	*P. sylvatica gangetica* (Blyth)	Jungle Longtail Warbler	*Jungli phutki*	
251	Do	Do	*P. flaviventris sindiana* Ticehurst	Yellow-bellied Longtail Warbler	*Phutki*	
252	Do	Do	*Orthotomus sutorius guzurata* (Latham)	Tailor Bird	*Darzi*	
253	Do	Do	*Locustella naevia straminea* Seebohm	Grass-hopper Warbler	*Phutki*	Doubtful occurrence
254	Do	Do	*Chaetornis striatus* (Jerdon)	Bristled Grass Warbler	*Phutki*	
255	Do	Do	*Megalurus palustris toklao* (Blyth)	Striated Marsh Warbler	*Phutki*	
256	Do	Do	*Acrocephalus stentoreus brunnescens* (Jerdon)	Indian Great Reed Warbler	*Phutki*	
257	Do	Do	*Hippolais caligata. caligata* (Lichtenstein)	Booted Warbler	*Phutki*	
258	Do	Do	*Sylvia hortensis jerdoni* (Blyth)	Orphean Warbler	*Phutki*	Doubtful occurrence
259	Do	Do	*S. communis icterops* Menetries	White-throat	*Sufedi*	Doubtful occurrence, migrant
260	Do	Do	*S. althaea althaea* Hume	Hume's Lesser White-throat	*Sufedi*	Doubtful occurrence

Serial No.	Order	Family	Zoological Name	Popular Name	Local Name	REMARKS
1	2	3	4	5	6	7
261	Passeriformes—*contd.*	Muscicapidae—*contd.*	*S. nana nana* (Hemprich and Ehrenberg)	Desert Warbler	*Phutki.*	
262	Do	Do	*Phylloscopus subviridis* (Brooks)	Brook's Leaf Warbler	*Phutki*	
263	Do	Do	*Cercomela fusca* (Blyth)	Brown Rock Chat	*Khar pidda*	
264	Do	Do	*Saxicola macrorhyncha* (Stoliczka)	Stoliezka's Bush Chat	*Pidda*	
265	Do	Do	*S. insignis* Gray	Hodgson's Bush Chat	*Jungli pidda*	Doubtful occurrence
266	Do	Do	*S. torquata maura* (Pallas)	Stone Chat	*Khar pidda*	
267	Do	Do	*S. caprata bicolor* (Sykes)	Pied Bush Chat	*Jungli pidda*	
268	Do	Do	*S. ferrea* Gray	Dark-grey Bush Chat	*Jungli pidda*	
269	Do	Do	*Oenanthe Xanthoprymna kingi* (Hume)	Red-tailed Chat or Wheatear	*Lal pidda*	
270	Do	Do	*O. picata* (Blyth)	Pied Chat	*Pidda*	In winters
271	Do	Do	*O. pleschanka pleschanka* (Lepechin)	Pleschanka's Pied Chat or Wheatear	*Pidda*	Doubtful occurrence
272	Do	Do	*Saxicoloides fulicata cambaiensis* (Latham)	Indian Robin	*Kalchuri*	
273	Do	Do	*Turdus ruficollis atrogularis* Jarocki	Red-throated Thrush	*Lal kastura*	(Very doubtful)

274	Do	Do	*T. viscivorus bonapartei* Cabanis	Mistle Thrush	*Kastura*	
275	Do	Prunellidae	*Prunella atrogularis huttoni* (Moore)	Black-throated Accentor	*Kasturi*	
276	Do	Paridae	*Parus major nipalensis* Hodgson	Grey Tit or Great Titmouse	*Ram gangra*	
277	Do	Sittidae	*Tichodroma muraria nepalensis* Bonaparte	Wall Creeper		
278	Do	Motacillidae	*Anthus trivialis trivialis* (Linnaeus)	Tree Pipit	*Char chari*	
279	Do	Do	*A. spinoletta coutellii* Audouin	Water Pipit or Alpine Pipit	*Char chari*	
280	Do	Dicaeidae	*Dicaeum agile agile* (Tickell)	Thick-billed Flower-pecker	*Phool chuki*	Doubtful occurrence
281	Do	Nectariniidae	*Nectarinia asiatica brevirostris* Blanford	Puple Sunbird	*Shakar khora*	
282	Do	Zosteropidae	*Zosterops palpebrosa palpebrosa* (Temminck)	White-eye	*Baboona*	
283	Do	Ploceidae	*Passer domesticus parkini* Whistler	House Sparrow	*Chiri*	
284	Do	Do	*Petronia xanthocollis xanthocollis* (Burton)	Yellow-throated Sparrow	*Jungli chiri*	
285	Do	Do	*Ploceus benghalensis* (Linnaeus)	Black-throated Weaver Bird	*Bijra*	
286	Do	Do	*Lonchura punctulata punctulata* (Linnaeus)	Nutmeg Mannikin, Spotted Munia	*Telia munia*	
287	Do	Fringillidae	*Acanthis flavirostris rufostrigata* (Walton)	Twite		
288	Do	Do	*Callacanthis burtoni* (Gould)			

Serial No.	Order	Family	Zoological Name	Popular Name	Local Name	Remarks
1	2	3	4	5	6	7
289	Passeriformes—*contd.*	Fringillidae—*contd.*	*Leucosticte nemoricola altaica* (Eversmann)	Hodgson's Mountain Finch	*Lal tuti*	
290	Do	Emberizidae	*Emberiza leucocephalos leucocephalos* S. G. Gmelin	Pine Bunting		
291	Do	Do	*Emberiza bruniceps* Brandt	Red-headed Bunting	*Gandam*	
292	Do	Do	*E. buchanani buchanani* Blyth	Grey-necked Bunting	*Chirta*	Doubtful occurrence
293	Do	Do	*E. striolata striolata* (Lichtenstein)	Striped, or Striolated Bunting	*Chirta*	
294	Do	Do	*E. schoeniclus pallidior* Hartert	Reed Bunting	*Chirta*	
295	Do	Do	*Melophus lathami subcristatus* (Sykes)	Crested Bunting	*Pathar chirta*	

APPENDIX 'B'

LIST OF FISHES FOUND IN LUDHIANA DISTRICT

Serial No.	Class	Order	Family	Zoological Name	Vernacular Name		Remarks
					In Punjab	Local	
1	2	3	4	5	6	7	8
1	Teleostomi	Cypriniformes	Cyprinidae	*OXygaster bacaila* (Ham.)	*Chilwax or chal*	*Chilwa or Chal*	
2	Do	Do	Do	*O. gora* (Ham.)	*Bounchi, Kundal*	*Chilwa*	
3	Do	Do	Do	*Barilius benedelisis* (Ham.)	*Pak-tah, Kun-nul, Dah-rah, Burreah, Puck-wah-ree*		
4	Do	Do	Do	*B. bola* (Ham.)			An important game fish attaining a length of 304 mm.
5	Do	Do	Do	*B. vagra* (Ham.)	*Lo-har-ree, Chari*		
6	Do	Do	Do	*Danio devario* (Ham.)	*Khan-ge, Maal-le, Pur-ran-dah*	*Kangi, Makhni*	
7	Do	Do	Do	*Esomus danrica* (Ham.)	*Chid-dul-lu*	*Makhni, Dhoban*	Larvicidal fish
8	Do	Do	Do	*Rasbora daniconius* (Ham.)	*Chin-do-lah, Raan-Kaal-le, Chari*	*Chal, Chilwa*	
9	Do	Do	Do	*R. rasbora* (Ham.)			

Serial No.	Class	Order	Family	Zoological Name	Vernacular Name		Remarks
					In Punjab	Local	
1	2	3	4	5	6	7	8
10	Teleostomi—*contd.*	Cypriniformes—*contd.*	Cyprinidae—*contd.*	*Amblypharyngodon mola* (Ham.)	*Makhni*	*Makhni*	
11	Do	Do	Do	*A. microlepis* (Bleeker)	*Makhni*		
12	Do	Do	Do	*Aspidoparia morar* (Ham.)	*Pa-o-char*	*Chilwa*	
13	Do	Do	Do	*Chagunius chagunio* (Ham.)			
14	Do	Do	Do	*Tor putitora* (Ham.)		(*Mahseer*)	A game fish growing up to 2,743 mm. (9 feet) in length
15	Do	Do	Do	*Tor tor* (Ham.)	*Kukhiah*		An important game fish growing up to 1,524 mm. (5 feet) in length
16	Do	Do	Do	*Puntius conchonius* (Ham.)			
17	Do	Do	Do	*P. sarana* (Ham.)	*Jundoori*	*Puthi*	
18	Do	Do	Do	*P. sophore* (Ham.)		*Ticher*	
19	Do	Do	Do	*P. ticto* (Ham.)		*Chidhu*	
20	Do	Do	Do	*P. chola* (Ham.)		*Ghidhu*	
21	Do	Do	Do	*P. tetrarupagus* (McClelland)		*Chidhu*	
22	Do	Do	Do	*P. chrysopterus* (McClelland)	*Pottiah*	*Ticher*	
23	Do	Do	Do	*Catla catla* (Ham.)	*Catla*	*Thail, Thaila*	An important food fish attaining a length of 1,828 mm. (6 feet) and is largely employed in pond culture

24	Do	Do	Do	*Cirrhinus mrigala* (Ham.)	(*Mirgal*)	*Mrigal Mori, Morakh*	An excellent species for stocking tanks and gives good sport on the rod, grows to 914 mm. (3 feet) in length
25	Do	Do	Do	*C. reba* (Ham.)	*Soonnee*	*Soonnee*	
26	Do	Do	Do	*Labeo boga* (Ham.)		*Mohrah*	
27	Do	Do	Do	*L. boggut* (Sykes)			
28	Do	Do	Do	*L. calbasu* (Ham.)	*Di, Dhai, Kalabans, Kalounchi*	*Kalaban, Kalyan,*	An important food and game fish growing to 914 mm. (3 feet) in length and is used largely in stocking tanks
29	Do	Do	Do	*L. caeruleus* (Day).			
30	Do	Do	Do	*L. gonius* (Ham.)	*Siriha*		
31	Do	Do	Do	*L. dussumieri* (Val.)	*Siriha*		
32	Do	Do	Do	*L. anrga* (Ham.)			
33	Do	Do	Do	*L. dero* (Ham.)	*Gid, Giddah*		
34	Do	Do	Do	*L. fimbriatus* (Bloch).			
35	Do	Do	Do	*L. rohita* (Ham.)	(*Rohu*), *Tapra, Dhambra*		Grows up to 914 mm. (3 feet) in length and is chiefly used for stocking tanks
36	Do	Do	Do	*L. dyocheilus* (McClelland)	*Kunni*		
37	Do	Do	Do	*L. bata* (Ham.)	*Bata*		
38	Do	Do	Do	*L. Pangusia* (Ham.)			
39	Do	Do	Do	*L. Portail* (Sykes)			

Serial No.	Class	Order	Family	Zoological Name	Vernacular Name In Punjab	Vernacular Name Local	Remarks
1	2	3	4	5	6	7	8
40	Teleostomi *contd.*	Cypriniformes *contd.*	Cyprinidae *contd.*	*Garra gotyla gotyla* (Gray)	*Dhoguru. Koorka*		
41	Do	Do	Do	*Osteobrama cotio* (Ham.)	*Sheesha Machhi*		
42	Do	Do	Cobitiidae	*Botia dayi Hora*			
43	Do	Do	Do	*Noemacheilus botia* (Ham.)	*Soon-da-lee, Sundali*		
44	Do	Do	Do	*Noemacheilus corica* (Ham.)			
45	Do	Do	Do	*Botea birdi* chaudhuri	*Chipar*		
46	Do	Do	Do	*Lepidocephalichthys guntea* (Ham.)			
47	Do	Do	Siluridae	*Ompak bimaculatus* (Bleeker)	*Pufta, Goonwah,*	*Pallu. Pabda*	
48	Do	Do	Do	*Wallago attu* (Bl. & Schn)	*Mullee*		
49	Do	Do	Schilbeidae	*Clupisoma garua* (Ham.)	*Bachwa, Dhungi, Dhunga*		
50	Do	Do	Do	*Pseudotropus athenoides* (Bloch)	*Challi*		
51	Do	Do	Do	*Eutropiichthys vacha* (Ham.)	*Bachwa, Jhalli, Challi,*	*Dungi*	
52	Do	Do	Do	*Silonia silondia* (Ham.)	*Silund*		
53	Do	Do	Heteropneus-tidae	*Heteropneustes fossilis* (Bloch)	*Singhi, Nallai, Nalakhi, Lakhi*		
54	Do	Do	Clariidae	*Clarias batrachus* (L.)	*Kug-ga, Maghura*		
55	Do	Do	Bagridae	*Mystus (Mystus) bleekeri* (Dav)	*Keenger*		

56	Do	Do	Do	*M. (Mystus) cavasius* (Hamilton)	*Keengar*	
57	Do	Do	Do	*M. (Mystus) vittatus* (Bloch)	*Keenger*	
58	Do	Do	Do	*M. (Mystus) tengara* (Ham.)	*Karaal, Ting-ga-rah*	
59	Do	Do	Do	*M. (Osteobagrus) aor* (Hamilton)	*Sang-go-ah, Shinghari*	
60	Do	Do	Do	*M. (Osteobagrus) seenghala* (Sykes)	*Tengga-ra, Shinghari*	
61	Do	Do	Do	*Rita rita* (Hamilton)		
62	Do	Do	Sisoridae	*Glyptothorax telchitta* (Hamilton)		
63	Do	Beloniformes	Belonidae	*Xenentodon cancila* (Ham.)	*Takla Machhi*	
64	Do	Cyprinodontiformes	Cyprinodontidae	*Aplocheilus panchax* (Ham.)		Larvicidal fish
65	Do	Mugiliformes	Mugilidae	*Rhinomugil corsula* (Ham.)	*Hurd-wah-re*	
66	Do	Ophiocephaliformes	Channidae	*Channa gachua* (Ham.)	*Doarrah, Dauli*	
67	Do	Do	Do	*C. punctatus* (Bloch)	*Dulloonga, Daulla, Kurrar*	
68	Do	Do	Do	*C. striatus* (Bloch)		
69	Do	Do	Do	*C. marulius* (Ham.)	*Sol, Saul*	
70	Do	Symbranchiformes	Amphipnoidae	*Amphipnous cuchia* (Ham.)		
71	Do	Perciformes	Ambassidae	*Ambassis baculis* (Ham.)	*Kung-gi, Sheesha Machhi*	
72	Do	Do	Do	*A. nama (Ham.)*	*Makhni, Ched-du-ah, Sheesha Machhi, Kangi*	

Serial No.	Class	Order	Family	Zoological Name	Vernacular Name — In Punjab	Vernacular Name — Local	Remarks
1	2	3	4	5	6	7	8
73	Teleostomi—*contd.*	Perciformes—*contd.*	Ambassidae—*contd.*	*A. ranga* (Ham.)	*Sheesha Machhi, Kangi*		
74	Do	Do	Nandidae	*Nandus nandus* (Ham.)	*Mussoassah*		
75	Do	Do	Anabantidae	*Anabas testudineus* (Bloch)			
76	Do	Do	Do	*Trichogaster fasciatus* (Bl. & Schn.)	*Kanghi*		
77	Do	Do	Gobiidae	*Glossogobius giuris* (Ham.)	*Goo-loo-wah, Boul-la*		
78	Do	Mastocembeliformes	Mastocembelidae	*Mastocembelus armatus* (Lacepede)	*Bahm, Vahm, Gro-age, Bam*		
79	Do	Do	Do	*M. pancalus* (Ham.)	*Cheu-da-la, Gurchee, Gro-age, Bam*		
80	Do	Do	Do	*Macrognathus aculeatum* (Bloch)			
81	Do	Do	Do	*Rhynchobedella aculeata* (Bloch)			
82	Do	Clupeiformes	Notopteridae	*Notopterus notopterus* (Pallas)	*Moh, But, Purri, Battu*		
83	Do	Do	Do	*N. chitala* (Ham.)	*Parri*		

APPENDIX 'C'
LIST OF AMPHIBIANS FOUND IN LUDHIANA DISTRICT

Class : Amphibia

Serial No.	Order	Family	Zoological Name	Popular Name	Remarks
1	2	3	4	5	6
1	Eucaudata	Ranidae	*Rana cyanophlyctis* Schneider	Indian Bull Frog	
2	Do	Do	*R. tigrina Daudin*		
3	Do	Do	*R. limnocharis* Wiegm		
4	Do	Do	*R. breviceps* Schneider		May occur
5	Do	Engystomatidae	*Microhyla ornata Dum* & Bibr.		Do
6	Do	Do	*Uperodon systoma* (Schneider)		Do
7	Do	Bufonidae	*Bufo melanostictus* Schneider		Do

APPENDIX 'D'
LIST OF REPTILES FOUND IN LUDHIANA DISTRICT
SNAKES
Class : Reptilia

Serial No.	Sub-order	Family	Zoological Name	Popular Name
1	2	3	4	
1	Squamata	Typhlopidae	*Typhlops braminus* (Daudin)	Common Blind Snake
2	Do	Boidae	*Eryx johni* Russell	Jhon's Sand Boa
3	Do	Do	*Python molurus* (Linnaeus)	Indian Python
4	Do	Colubridae	*Ptyas mucosus* (Linnaeus)	Rat Sanke or 'Dhaman'
5	Do	Do	*Coluber diadema* Schlegel	Diadem Snake
6	Do	Do	*Lycodon aulicus* Linnaeus	Wolf's Snake
7	Do	Do	*Natrix piscator* (Schneider)	Water Snake
8	Do	Do	N. *stolata* (Linnaeus)	Grass Snake
9	Do	Elapidae	*Naja naja* (Linnaeus)	Cobra
10	Do	Do	*Bungarus caeruleus* (Schneider)	Kraite
11	Do	Viperidae	*Echis carinatus* (Schneider)	Saw Scaled Viper

APPENDIX 'D' (CONTD.)

LIZARDS

Class Reptilia

Serial No.	Order	Sub-Order	Family	Zoological Name	Popular Name
1	2	3	4	5	6
1	Squamata	Lacertilia	Gekkonidae	*Hemidactylus flaviviridis* Ruppell	House Gecko
2	Do	Do	Do	*H. leschenaulti* Dum. & Bibr	House Gecko
3	Do	Do	Do	*H. brooki* Gray	
4	Do	Do	Agamidae	*Calotes versicolor* (Daudin)	"Blood Sucker" or Garden Lizard
5	Do	Do	Scincidae	*Riopa punctata* (Gmelin)	Skink
6	Do	Do	Do	*Mabuya macul aria* (Blyth)	Skink
7	Do	Do	Varanidae	*Varanus monitor* (Linnaeus)	Monitor Lizard

TORTOISES

Serial No.	Order	Family	Zoological Name	Popular Name
1	2	3	4	5
1	Testudines	Trionychidae	*Lissemys punctata* Gray	Pond Turtle

APPENDIX 'E'
LIST OF MAMMALS FOUND IN LUDHIANA DISTRICT

Serial No.	Order	Sub-Order	Family	Zoological Name	Popular English Name	Local Name
1	2	3	4	5	6	7
1	Insectivora	Insectivora Vera	Erinaceidae	*Hemiechinus auritus collaris* (Gray)	Long-eared Hedgehog	
2	Do	Do	Do	*Suncus murinus tytleri* Blyth	House Shrew	
3	Chiroptera	Megachiroptera	Pteropidae	*Pteropus giganteus giganteus* Brunnich	Indian Flying Fox	
4	Do	Do	Vespertilionidae	*Myotis blythi* Tomes	Large Mouse Eared Bat	
5	Do	Do	Do	*Eptesicus nasutus* Dobson	Sind Bat	
6	Do	Do	Do	*Pipistrellus minus* Wroughton	Indian Pygmy Pipistrelle	
7	Do	Do	Do	*Nycticeius pallidus* Dobson	Yellow Desert Bat	
8	Do	Do	Do	*Plecotus auritus* Linnaeus	Long-eared Bat	
9	Primates	Anthropoidea	Cercopithecidae	*Macaca mulatta* (Zimmermann)	Rhesus-Monkey	*Bandar*
10	Do	Do	Do	*Presbytis entellus* (Dufresne)	(Entellus) Monkey	*Langur*
11	Carnivora	Carnivora Vera	Canidae	*Canis lupus* Linnaeus	Wolf	*Bheria, bhagiar*
12	Do	Do	Do	*C. aureus* Linnaeus	Jackal	*Gidar*
13	Do	Do	Do	*Vulpes vulpes pusilla* Blyth	Common Red Fox	*Lumri*
14	Do	Do	Mustelidae	*Aonyx cinerea concolor* (Rafinesque)	Oriental Small Clawed Otter	

15	Do	Do	Viverridae (Sub-family : Mungotinae)	*Herpestes auropunctatus* (Hodgson)	Small Indian Mongoose		
16	Do	Do	Felidae	*Felis caracal* Schreber	Caracal Lynx		
17	Ungulata	Artiodactyla	Bovidae	*Gazella gazella* (Pallas)	Gazelle	*Chinkara*	*Harni, chi-kara*
18	Do	Do	Do	Antilope cervicapra (Linnaeus)	Black buck		
19	Do	Do	Do	*Boselaphus tragocamelus* (Pallas)	Blue-Bull	*Nilgai*	*Roz*
20	Do	Do	Cervidae	Axis axis (Erxleben)	Spotted-Deer	*Cheetal*	
21	Do	Do	Suidae	*Sus scrofa* Linnaeus	Indian Wild Boar		
22	Lagomorpha	Do	Leporidae	*Lepus nigricollis* Cuvier	Indian Hare	*Saha,*	*sayar, khargosh*
23	Rodentia	Simplicidentata	Sciuridae	Funambulus pennanti Wroughton	Northern Palm-Squirrel		
24	Do	Do	Hystricidae	*Hystrix indica* Kerr	Indian Porcupine		
25	Do	Do	Muridae	*Apodemus flavicollis* Mechic	Yellow-necked Field Mouse		
26	Do	Do	Do	*Rattus rattus* (Linnaeus)	House Rat		*Chuha*

CHAPTER II

HISTORY

Importance of Ludhiana District in Punjab History.—Few districts in the Punjab possess greater historical interest than Ludhiana. The historic town on the high road from Central Asia must have been crossed by successive waves of conquest or immigration. More recently, some of the most decisive conflicts for empire took place in its neighbourhood. As a result of its geographical position, the Punjab was always an outlying province of Hindustan. Once across the Satluj, an invader had nothing to stop him from reaching Delhi. Perhaps the greatest interest attaches to the region as the cockpit of the struggles between the rising Sikh power and the Muslim government of the day. With the dawn of the 19th century, the English power extended northwards. Under the Treaty with Maharaja Ranjit Singh in 1809 the Satluj was fixed as the limit of its territories. According to the new arrangement, Ludhiana remained for nearly half a century the British outpost and the seat of the political agency at the strategic point from which the British were in contact with the only remaining independent Indian power, the kingdom of Lahore.

A. EARLY PERIOD

Little is known about Ludhiana in the ancient period on account of acute dearth of materials on which to base any historical account of Ludhiana District. The same is affirmed by Tolbort[1], who writes :—

> "I presume that it formed a portion of the kingdom of Magadha; Sunet, Tihara, Machhiwara and Bahlolpur date from the Hindu period. It is said that Machhiwara is mentioned *in Mahabharata*, and that Bahlolpur formerly bore the name of Muhabatpura[2]".

Machhiwara.—It is true that, as Tolbort points out elsewhere, there are many places named Machhiwaras, but there is some reason to believe that a large city existed in the neighbourhood of the present town. The surrounding area is covered with mounds, whose antiquity is shown by the large bricks

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1. T. W. Tolbort, C. S., was the author of a series of descriptive articles on Punjab districts on the basis of information collected from local sources, published in the *Proceedings, Asiatic Society, Bengal,* in and about the year 1869. The studies covered headings other than those of purely official and administrative interest, viz., Natural Features, History and kindred topics.

2. *Ludhiana District Gazetteer,* 1904, pp. 13—15.

found in them. There are five wells, also built of large bricks, to the west of the town, which seem to show that the city in ancient times lay in that direction. The people say that one well formerly bore an inscription that the digger had sunk no less than 360 wells in Machhiwara.

Sunet.—It is possible that antiquarian research may give us detailed information about the district, but at present it has been applied only to the mound at Sunet, some six kms. west of Ludhiana (on Ludhiana-Jagraon road), which is not only of considerable extent, but also clearly marks the site of an important city. It was visited by General Cunningham during the course of his survey in 1878-79[3]. General Cunningham examined bricks, one or two sculptures and a number of coins. Concerning the last he wrote : "From these coins the following facts may be deduced with almost absolute certainty :—

(1) "The town Sunit was in existence before the Christian era, as evidenced by the coins of Uttamadatta and Amoghabhuti. It continued to flourish during the whole period of the dominion of the Indo-Scythians, and of their successors who used Sassanian types down to the time of Samanta Deva, the Brahman Shahi King of Kabul and the Punjab".

(2) "From the total absence of coins of the Tomara Rajas of Delhi, as well as of all the different Muhammadan dynasties, it would appear that Sunit must have been destroyed during one of the invasions of Mahmud of Ghazni, and afterwards remained unoccupied for many centuries."

There are various legends about the destruction of Sunet mentioned by Cunningham, all of which represent the last Raja as living on human flesh and as owing his downfall to not having spared the only child of a Brahman widow. Tolbort appears to think that the town was overthrown by an earthquake. However this may be, it is likely that Sunet was the headquarters of some Hindu kingdom, small or great.

Tihara.—Current tradition identifies Tihara, situated in the north-west corner of Jagraon tehsil, with the city of Varat mentioned in the *Mahabharat*, and this is said to have been its name up to the Muhammadan times. It was a place of some importance under the Mughals ; but the old town has long since been swallowed by the river which ran under it. The present site of the town is at some distance from the older one. Tihara may have been the capital of a small Hindu kingdom. There was also a city called Mohabbatpur, close

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3. The results of his exploration are given in the *Archaeological Survey of India Report*, Vol. XIV, pp. 65—67.

to Bahlolpur; but of this, too, all traces have disappeared. It is quite possible that in early times the country was to some extent inhabited by a nomad people and there were a good many towns and villages along the banks of the river but they and the races that dwelt in them have long since disappeared, perhaps in the early Muhammadan invasions when the country was overrun by plundering Biluchis and other tribes.

General Cunningham does not mention the small square copper coins containing on one side the Buddhist wheel and on the other names of Rajas in old Sanskrit letters, which are still found. On the mound, besides coins, impressions of seals in burnt clay , seals in stone and copper, beads, carved bricks, large bricks, dice, glazed pottery and many other antiquities are still found. Several impressions of the Yaudheyas in clay have also been discovered at the site.

The Yaudheyas.—The area comprising the present district of Ludhiana was under the Yaudheyas who were ruling in south-eastern Punjab during the first century. A.D. Evidently they had successfully withstood the Saka onslaught and had emerged victorious from the struggle. In the middle of the second, century A.D. we find them still strong and prosperous, firmly upholding their independence. In the Girnar Rock inscription of Rudradaman, dated Saka year 72 (A.D. 150), they are described as a proud people who had proclaimed their title of heroes amongst all Kshatriyas. Rudradaman's claim to have annihilated them appears to be a vain boast; for the continued existence of the Yaudheya republic in the late second century A.D. is proved by their coinage. Rudradaman may have defeated them, but evidently he could not destroy their power. According to Allan, the struggle with the Sakas and the war with Rudradaman put a great strain on the financial resources of the Yaudheyas, and this accounts for the poor state of their currency of the late second century[4]. After a brief period of strain they recovered their strength and played a still more glorious role. The legends *yaudheyaganasya jaya* on their coins and *yaudheyanam Jayamantra-dharanam* on the clay seals discovered from Sunet near Ludhiana[5] show that they had won a great victory to commemorate which a special series of coins and memorial medals were struck. Altekar rightly concluded that this evidence points to a victory over the Kushanas[6]. It was the Yaudheyas who dealt the first great blow at the Kushanas and turned them out of the eastern Punjab.

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4. J. Allan, *Catalogue of the Coins of Ancient India* (*in the British Museum*) (Oxford, 1967), pp. clii—cliii.

5. *Journal of the Asiatic Society of Bengal*, 1884, pp. 134 ff.

6. *Proceedings of the All India Oriental Conference*, Vol. XII, Benares 1943, pp. 513 ff.

It is further revealed that "The Yaudheyas ruled independently throughout the third and early fourth centuries. Their coinage of this period bears the proud legend *jaya yaudheya* and the figure of Karttikeya, god of war, and his consort Shashthi. The Yaudheyas were finally subdued by Samudragupta, in the middle of the fourth century. Thereafter their coinage ceases." [7]

B. MEDIEVAL PERIOD

I. Turks and Afghans

Early Rajput Settlers.—The ancestors of the present agricultural population of the district most probably immigrated within the last 700 or 800 years. The Rajputs were the first settlers and came from the south. As regards Turks and Afghans it is stated that in the reign of Muhammad of Ghor their ancestors found the country all waste and obtained from the Sultan the grant of a large tract along the Satluj, where they settled. Their villages lie almost all along the ridge over the old course of the river, or in the valley beneath. They were followed by the Jats who mostly came from the same direction and began to settle in the uplands 400 or 500 years ago, first in the eastern parts, and much later in the west, tahsil Jagraon, etc.

Founding of the town of Ludhiana and first settled Government of the country under the Lodis.—There is no information about the district during the earlier Muhammadan invasions; and it is not till the time of the Lodis (A.D. 1451-1526) that its name is mentioned. The *Tarikh-Panjab* by Ghulam Mohayuddin alias Bute Shah gives the following account of the first attempt to establish a settled Government:

"In the reign of Sikandar (A.D. 1489-1517), son of Bahlol Lodi, the people about Ludhiana were oppressed by the plundering of Biluchis, and applied to the Emperor for assistance. Sikandar, in answer to their prayer, sent two of his Lodi chiefs, by name Yusaf Khan and Nihang Khan, with an army. These chiefs fixed on the present site of the Ludhiana city, which was then a village called Mir Hota, as their headquarters and restored order in the country. Yusaf crossed the Sutlej to check the Khokhars, who were then plundering the Jullundur Doab, and settled at Sultanpur. Nihang Khan remained at Mir Hota as the Emperor's lieutenant; and called the place Ludhiana. He was succeeded by his son and grandson. The latter, Jalal Khan, built the fort of Ludhiana out of the bricks found at Sunet. His two sons partitioned the country round Ludhiana, which was then lying waste, amongst the people of the town, and distributed them in villages. In the time of Jalal Khan's grandsons, Alu Khan and Khizr Khan, the Lodi dynasty was overthrown by Babar; and the Lodis of Ludhiana sunk to the position of ordinary subjects of the Mughal

7. K. A. Nilakanta Sastri, *A Comprehensive History of India*, Vol. II, *The Mauryas and Satavahanas*, 325 B.C.—A.D. 300, pp. 255-56.

empire. They are said to have lived close to the fort for many generations, but all traces of them have now disappeared, and even the tombs of Nihang and his immediate descendants have been lost sight of, although they are said to have been standing some years ago."

Wihtout vouching for the accuracy of this account it may be said that the founding of the town of Ludhiana and the first systematic attempt to people the country about it, date from the time of the Lodi family which subsequently held the throne of Delhi from 1451 to 1525. The earliest mention of the town appears to occur in the year 1420 when Tughan Rais, who rose in rebellion against Khizr Khan and had overrun the country as far as Mansurpur and Payal, retreated across the Sutlej near the town of Ludhiana and confronted the royal army sent against him from the other side of the river. In the r ign of Mubarak Shah Jasrath, the Khokhars plundered the country from Ludhiana to Ropar and the former town appears to have been held by the Khokhar chief, for he kept Zirak prisoner there and made it the base of his attack on Sirhind, retrea ing to it when compelled to abandon the siege of the said fortress. The imperial forces then advanced to Ludhiana, which Jasrath abandoned, but they were unable to pursue him across the Satluj as it was the rainy season. Under Bahlol Lodi's (A. D. 1451-1489) beneficient administration the prosperity of the country reached its summit, and the reign of his successor, Sikandar (A. D. 1489-1517), was a most prosperous one. In 1500, Khawas Khan, the governor of Machhiwara, was commissioned by Sikandar Lodi to apprehend Asghar, the recalcitrant governor of Delhi.[8]

II. The Great Mughals

On the eclipse of the Lodis at Panipat in 1526 A. D., the progress of the country does not appear to have been impeded by the change of rulers. The Mughals, the new rulers of Delhi, established a strong government at Sirhind to which Ludhiana and the country around it were attached as a *mahal*. Sirhind, with the rest of the empire, passed into the hands of the Sur dynasty; and it was at the town of Machhiwara, 25 miles east of Ludhiana, that Humayun fought the battle with Sikandar Sur, which restored him to the throne of Delhi in 1555[9].

It is to the reign of Akbar (1556-1605) that most of the people in the eastern part of the district ascribe the advent of their ancestors and the founding of their villages, and it is most probable that before commencement of the century there were only a few villages scattered over the district (mostly Rajput),

8. A. B. Pandey, *The First Afghan Empire in India* (1451—1526 A.D.), p. 150.

9. Bairam Khan commanded the Mughal army during the battle of Machhiwara in 1555.

and that the great immigration of Jats, who occupy the whole of the uplands, began under the settled rule of the Lodis and continued during the whole of 16th century. The *Ain-i-Akbari* enumerates the following *mahals* (or *parganas* as we should call them): Tihara, Hatur, Bhundri, Ludhiana, Machhiwara and also Payal and Doraha. The first three are still fairly large villages in Jagraon tahsil. The town of Payal and the village of Doraha are in Payal sub-tahsil; and it is clear that these seven *mahals*, which were in Sirhind division or Sarkar of the Delhi Province or Subah, covered most of the present Ludhiana district and the adjoining parts of Patiala district.

III. Decline of the Mughal Empire and the Rise of the Sikhs

Guru Gobind Singh (1675-1708), the last of the Gurus, succeeded Tegh Bahadur; and under him commenced the long struggle between the Cis-Satluj Sikhs and the Muhammadan Governors of Sirhind, which was only a part of Aurangzeb's persecution of the rising sect. Ludhiana district, with the adjoining country to the south, was the scene of many of the great Guru's exploits and encounters with his enemies; and in Sirhind his wife and childern were murdered about the year 1700— a deed that has made the place for ever accursed to all Sikhs. It is probably due to the bigotry and persecution of Aurangzeb (whose memory the Sikhs to this day hold in great detestation, invariably referring to him as "Ranga") that we should ascribe the complete transformation of the followers of the Gurus into a militant power.

After his escape (in 1704) with his three followers from the forests of Chamkaur, which the Mughal army had besieged, Guru Gobind Singh reached the small town of Machhiwara and hid himself in a big garden to the east of the town. The garden belonged to two Rohilla Pathans, named Ghani Khan and Nabi Khan. They suddenly turned up there and were struck with amazement and terror on finding Guru Gobind Singh on their land. Their avarice was aroused and for a moment they thought of winning wealth and honour by betraying him to the government. But the Guru had several times purchased horses from them and had always treated them with the greatest kindness. Humanity and gratitude soo prevailed and they took the Guru under their protection. The Guru changed his dress and assumed the disguise of a Muhammadan saint, while Ghani Khan and Nabi Khan declared that he was their Pir and was on a visit to them from the celebrated shrine of Uchch[10]. The Guru next took shelter with Qazi Pir Muhammad of Solah. There the three Sikhs, who had escaped with the Guru from Chamkaur and

10. The Pirs of Uchch in the district of Multan keep long beards and do not cut their hair, so that the Guru with his hair down must have made a typical pir.

had been wandering in search of him, met him, and the Guru left for Malwa[11] in the disguise of a Pir of Uchch.

Aurangzeb died in 1707 and Guru Gobind Singh in 1708. The latter was succeeded by Banda, under whom the imperial troops were defeated and Sirhind was sacked in 1710. But although the Sikhs twice overran the country between the Satluj and the Yamuna, they were finally dispersed, and Banda taken prisoner and executed in 1716.

For a generation after, the Sikhs were much suppressed and persecuted; and it was only when all energy had departed from the empire that they were able to raise their heads again. From this time, the struggle was continued by the Phulkian and other chiefs, who saw their way to establishing kingdoms for themselves on the ruins of the empire, now tottering to fall. Maharaja Ala Singh, the distinguished scion of the Patiala house, succeeded his father, Rama, in 1714. He was contemporary to Rai Kalha (II) of Raikot, under whom the Rais of Raikot, who had hitherto held the lease of a considerable tract from the emperors,[12] first asserted their independence. The district as then constituted cannot be said to have a separate history during these times and it would be impossible to detail here the conflicts between the various claimants for its territory. The principal were the Rai, Maharaja Ala Singh of Patiala, and the representative of the Delhi Empire at Sirhind. In 1741, we find a combination of the two last against Rai Kalha who had been endeavouring to throw off the imperial authority. Rai Kalha was defeated and chased out of the country, but he soon recovered the territory which he had hitherto held as a fief of Delhi. The alliance between the Sikhs and the imperial troops lasted for a very short time, and the Rai was then able to extend his territories unopposed, there being plenty of room for him to do so at the expense of the empire without danger to the designs of the Sikh chiefs[13].

1. From the Durrani Invasion to the taking of Sirhind by the Sikhs (1747—1763)

First Durrani Invasion of India, 1747-48[14].—On his first expedition to India, Ahmad Shah Durrani left Peshawar about the middle of December, 1747, and occupied Lahore on January 12, 1748. To oppose his advance, the royal army arrived in the neighbourhood of Sirhind on February 25, 1948, and stayed there

11. In the Punjab the name Malwa is applied to the district of Ferozepore and a part of the erstwhile Patiala State.

12. Detailed history of the Rai family of Raikot is given in a subsequent section.

13. In a foot-note to page 60 of the "*Punjab Rajas*" by L. H. Griffin is given a short sketch of the history of the Rais, and it is said that they got possession of the town of Ludhiana in 1620 A.D.; but this is evidently a mistake. The town and fort of Ludhiana did not fall into the hands of the Rais till about 1760.

14. Ganda Singh, *Ahmad Shah Durrani*, pp. 44, 51, 54—69.

on the following day (February 26). Ali Muhammad Khan Ruhela, the Faujdar of Sirhind, had deserted the place and fled to his own country at the foot of Kumaun hills (U.P.). The extra luggage, carts and camels, belonging mostly to the Wazir, were dropped in the fort of Sirhind without making any suitable arrangements for its defence beyond leaving a garrison of only one thousand horse and foot under an eunuch. On the 27th February, 1748, the march by Faujdar of Sirhind was resumed in the direction of Machhiwara, where the Satluj was considered to be more easily fordable than at Ludhiana. But in leaving the main road to Delhi, via Ludhiana and Sirhind, clear for the Shah to march direct upon the imperial capital, if he so desired, they committed an inexcusable blunder and betrayed utter ignorance of strategy of war.

Ahmad Shah left Lahore on February 19, 1748 to meet the advancing Mughal army. Crossing the Sutlej at Ludhiana on March 1, he made straight for Sirhind. The garrison at the station offered little resistance, and opened the gates to the Shah as soon as the ammunition ran out. A large number of men were put to the sword and women captured as slaves. Many houses in and outside the fort were set on fire and plundered.

This news was carried to Abul Mansur Khan the same day by his *harkaras* at the village of Bharoli, at the next stage from Machhiwara, where Prince Ahmad was at that time encamped. The Wazir was not prepared to believe this, as none of his own *harkaras*, who had, perhaps, all been killed, had sent him news even of the arrival of the Durrani. He, therefore, sent a few men to Sirhind, which was only at a distance of about twelve *koh* (about 24 miles or 40 kms.) from the camp, to verify the news and was soon distressed to learn that all was up with the place. The loss of Sirhind and the intelligence that the Durrani was preparing himself to march upon Delhi staggered the Mughal army and it was feared that they might scatter away without offering a battle. Abul Mansur Khan had to exert a good deal to keep the officers together and he suggested to the Wazir to march towards Delhi in pursuit of the Afghans.

The Battle of Manpur

On March 3, 1748, Prince Ahmad moved out towards Sirhind and fixed his camp at the village of Manpur (tahsil Samrala) at a distance of about 10 miles (16 kms.). Ahmad Shah, on the other hand, established his base depot in the gardens of Sirhind and dug his entrenchments about five miles ahead. The entrenchments were about the same distance from Manpur[15]. The fighting began with the firing of guns from both sides.

15. The two armies met on the sandy plain between the villages of Manpur, Barwali, etc., a few miles to the north-east of Khanna, in Samrala tahsil. (Ludhiana District Gazetteer, 1904, p. 18)

The position taken up by the Mughal army was hazardous. The Shah, on the other side, was in a more advantageous position, with the city of Sirhind having plenty of food and water behind him. But the Durrani was greatly handicaped for want of artillery. He had only one heavy gun and seven pieces of light *top-i-jilan*, as against several hundred Mughal guns of various descriptions, including many heavy pieces. He could not, therefore, launch an offensive against the enemy on any large scale. He had to content himself with sending out roving parties and skirmishers to harass the Mughals on all sides, confine them to the limited area of their camp and thus throw them on the defensive. Their commissariat not properly organised and supplies from the neighbourhood cut off and appropriated by the Afghans, the want of food and fodder, coupled with the scarcity of water, greatly perplexed the Mughal Commander-in-Chief. Raja Ishri Singh and some other Sardars counselled the Wazir to take the offensive and rush upon the Durranis and drive them away.

But the Wazir purposely avoided a general action and wished to prolong the war in the hope of starving the Afghans into surrender by setting the local chiefs, such as Maharaja Ala Singh of Patiala and Rai Kalha of Raikot, upon the Afghan foraging parties and food convoys and ultimately annihilating them with the fire of his artillery. In this way, a week passed without any serious fighting. But Ahmad Shah, on the other hand, was not idle. His skirmishing parties had been more successful and he had practically turned the tables upon the Wazir himself. It is true that Maharaja Ala Singh and Rai Kalha occasionally succeeded in carrying off a number of Afghan camels and mules to the Wazir's camp, but the large number of troops in the Mughal camp could not maintain themselves for long without a regular train of convoys. The situation had become difficult with the Durrani rovers hovering round the Mughal camp for miles together. Finding the Wazir thus hedged in, Ahmad Shah thought of taking the offensive. On March 9, 1748, he mounted the only heavy gun he possessed on an eminence near the Mughal camp and started pouring fire into their ranks. It was so well-directed that its shots passed over the enemy entrenchments and hit the tents of the prince and his nobles. A large number of men and animals were killed. The number of casualities appears to have been so large and dismay in the Mughal camp so great that the Wazir, pressed by Abul Mansur Khan and others, felt compelled to risk an open action.

The day fixed for the general action was Friday, March 11, 1748. The whole Mughal army of about sixty thousand combatants was divided into five divisions with the chief command in the hands of the Wazir.

Ahmad Shah placed three thousand Qizzilbash Iranis under the command of Muhammad Taqi Khan Shirazi and ordered him to move against Mir Mannu, while he himself, at the head of his Afghan veterans, advanced against Abul

Mansur Khan. The camel-swivels were also ordered to remain in readiness for action.

The battle began with broadside from the Durrani light guns at about eight o' clock in the morning. The Mughal commander-in-chief had just finished his *Namaz-i-Chasht*, between nine and ten in the morning, and was still on his prayer carpet reciting the *Wazifa*, when, all of a sudden, a ball from an Afghan gun fell upon his tent and, tearing it, it first struck the ground and then rebounded and fatally wounded him in the back near the waist. At that time Farash Khan, Sangin Beg Khan and three or four other companions were also present there, but nobody else was hurt.

Mir Mannu takes the command.—Seeing the Wazir fatally wounded, all those present there began to cry and lament. His son, Muin-ud-Din-Khan, was then with the batteries. On receipt of a message, he hurried to his father's presence. The Wazir could see that he was dying. "It is all up with me, my child", he said to Mir Mannu, as Muin-ud-Din was lovingly called.

"But as the Emperor's work is still unfinished, you must mount immediately and deliver the assault before this news spreads. The claim of (the Master's) salt is above everything else. My business may be looked to later on." With these last words to his son and the *Kalimah-i-Shahadat* on his lips, Wazir-ul-Mumalik Itmad-ud-Daula Nawab Qamar-ud-Din Khan Nusrat Jang, the Commander-in-Chief of the Mughal army, breathed his last[16].

The death of his father was very shocking for Mir Mannu; but he showed great strength of mind and courage. Having hurriedly buried him in his blood-stained clothes in the same tent and levelling the ground to leave no marks, Manu rode his father's elephant and ordered the drums to be beaten. The tragic news was only known to the Prince, Abul Mansur Khan Safdar Jang, Saadat Khan Zulfiqar Jang and Nasir Khan. It was given out that the Wazir had caught a cold and had ordered his son, Mir Mannu, to lead the charge in his place. He then called the Sardars to his presence and made a stirring appeal to them, saying, "Whosoever wishes to come with me to the field of battle may do so, and he, who does not, may go to his tent for to turn back during the fight is ruinous. As for me, as long as there is life in my body, I shall, with God's grace, fight on." With these words he rushed into the field of action to oppose the advancing Durranis[17].

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16. Anand Ram Mukhlis, *Tazkirah-i-Anandram* (MS.), f. 273 ; Jadunath Sarkar, *Fall of the Mughal Empire*, (Calcutta, 1932), Vol. I, pp. 223-24.

17. Anand Ram Mukhlis, *Tazkirah-i-Anandram* (MS.), f. 276.

Somehow the intelligence of the Wazir having been killed had reached the Durrani chiefs. Thereupon, Muhammad Taqi Khan Shirazi from the right turned to the side of Mir Mannu and delivered assault after assault upon his troops. It was at this time that Mir Mannu reappeared on the scene to cheer up his men and stopped the progress of the Afghans. The Shah sent in fresh draughts to reinforce the Shirazi, but in spite of desperate fighting Mannu could not be dislodged from his position.

The battle at its height

Mannu now rose to the full height of his latent faculties and furiously rushed upon the advancing Durranis. He was supported by Zulfiqar Jang Saadat Khan and by Nasir Khan from the rear. The Mughals and Afghans came closer and grappled with one another. In addition to the fire of artillery and muskets, there were now flashes of the cold steel which claimed additional toll of human lives. In this hard fought contest Mannu himself had, not unoften, to discharge volleys of arrows to check the Afghan advance, and he is said to have emptied two quivers on his enemies.

The battle raged so furiously that there was hardly an officer who remained unscathed. Mannu himself had his skin scratched by a bullet, his brother Fakhr-ud-Din had been wounded in the foot, Adina Beg Khan of the Jullundur Doab received two bullet-wounds, Jani Khan, Darogha, Shahab-ud-Din and his son, Bahroz Khan and many other officers were killed. It was at this moment of crisis when the fate of the Mughal empire was hanging in the balance that the fresh reinforcements of Abul Mansur Khan Safdar Jang turned the tables upon the Durranis.

Calamity in the Afghan Ranks

Though signally defeated, Ahmad Shah saved the Afghans from utter rout and wholesale massacre. He decided to retire towards Sirhind. But he kept his head cool and clear and withdrew his men step by step. Under the pressure of the Mughals, he would withdraw to some distance and then arrange his men in a battle array and begin firing. He would fall back again and repeat the same tactics. Towards the evening he came to a *garhi*, a small mud-fortress, between Manpur and Sirhind, and occupied it. From under its shelter he started firing into the advancing Mughals and checked their advance. By the time the guns arrived, it was all dark and the Mughals returned to their camp. Under cover of darkness, Ahmad Shah retired to Sirhind and began preparations for his return to Afghanistan. The Mughals had expected him back in the field on the morning of March 12, 1748. But as he had made no appearance, they sent out *harkaras* to find out his whereabouts. But they returned only with rumours that he had been slain in the battle or at least seriously wounded.

On March, 13, 1748, Ahmad Shah sent out some pieces of light artillery to engage the enemy, while he himself was making arrangements for the despatch of his treasure and luggage to Lahore.

The Mughals held their ground on the 14th March also. On the 15th Ahmad Shah sent Muhammad Taqi Khan to the Prince with a pretended message for peace, saying that he would return to his country if the territories given over to Nadir Shah be left to him. The Prince and Muin were not in a mood to hear anything of the sort and sent back a curt reply. Ostensibly dejected at the refusal of peace terms, the Afghans appeared again for a fight on March 16, 1748. But in fact this was all to beguile the Prince and Safdar Jang and gain time to get their treasure and luggage safely out of Sirhind and save them from falling into the hands of the Mughals. The main army had left unnoticed with all the property and some important prisoners of war by an unfrequented jungle path and it was only the rear-guard that was playing hide and seek with the Mughals and keeping them occupied. On March 17, 1748, it also disappeared and before the Afghans could be traced and chased, they reached Ludhiana, crossed the Satluj and marched towards Lahore[18].

It is said by the villagers that the loss on both sides was very heavy and that for a long time the stench of the dead bodies made cultivation impossible.

To the subsequent invasions of Ahmad Shah no resistance was attempted by the imperial troops in Sirhind, but his armies were constantly harassed by Phulkian chiefs and the Rais of Raikot. It was about 1760 that the Rais were permitted by him to take possession of the town and fort of Ludhiana and to extend their power over the country.

Marathas in the Punjab[19].—Raghunath Rao (the Peshwa's brother) had expelled Taimur Shah (the son of Ahmad Shah Durrani) and his general, Jahan Khan, from the Punjab and appointed Adina Beg Khan as the Maratha viceroy of the province in April-May, 1758. On Adina Beg Khan's death on September 15, 1758, Jankoji Shinde, at the instance of Wazir Imad-ud-Mulk Ghazi-ud-Din, marched on February 1, 1759, towards Lahore to maintain peace and order in the Punjab. He arrived at Machhiwara, on the southern bank of the Satluj in March, 1759. He seems to have sent Sabaji Patil in advance to Lahore, but, as he found that the Sikhs were then virtually in possession of Lahore and its neighbourhood, with huge forces at their disposal, and as its capture and occupation would not be an easy job, he decided not to cross the river. At Machhiwara, Jankoji received the members of Adina Beg's family (perhaps his widow and son) and other residents of Doaba Bist Jullundur who paid him some money as tribute.

18. Anand Ram Mukhlis, *Tazkirah-i-Anandram* (MS.) , pp. 234—96 ; Jadunath Sarkar, *Fall of the Mughal Empire* (Calcutta, 1932), Vol. I, pp. 212—28.
19. Ganda Singh, *Ahmad Shah Durrani*, pp. 216—20.

Wadda Ghalu-ghara or the Great Holocaust of 1762.—In 1761, Zain Khan was appointed Governor of Sirhind by Ahmad Shah Durrani. In the following year (1762), there was a formidable combination against Zain Khan of all the Phulkian and other Cis-Satluj Sikh chiefs, assisted by numerous bands of Sikhs from the Manjha or 'Central Punjab'. Ahmad Shah heard of this at Lahore; and marching to the Satluj in two days, he crossed at Ludhiana and on February 5, 1762, fell upon the allies at a short distance to the south of it just as they were attacking Zain Khan. The Sikhs numbered about thirty thousand, including a large number of women, children and non-combatant followers. Out of these about ten thousand, mostly women, children and old men were killed. This loss for a small community of the Sikhs was so great that this battle, which was more of a carnage, has been called *Wadda Ghalu-ghara*, the Great Holocaust the first smaller one having taken place on June 2, 1746, at the hands of Governor Zakariya Khan's Diwan, Lakhpat Rai of Lahore[20].

This disaster does not appear to have had much effect on the Sikhs, for, in the following year, 1763, they were able to bring together a large army composed of Cis-Satluj Sikhs aided by bodies of their co-religionists from across the Satluj. Zain Khan was defeated and slain on January 14, 1764, and the Sikhs, following their victory, took possession of Sirhind, which they levelled to the ground.

2. Partition of the country after the fall of Sirhind

With the fall of Sirhind on January 14, 1764, vanished the last vestige of imperial control over that portion of the empire of which it was the headquarters. The next year Ahmad Shah passed through the country. He recognised this by appointing Maharaja Ala Singh of Patiala as the Governor of the place. In 1767, Ahmad Shah reached Ludhiana on his last expedition into India but got no further. He confirmed Amar Singh, the grandson of Ala Singh, in the government of Sirhind, and gave him the title of Maharaja; and from this time the Sikhs and other chiefs who had taken possession of the country were left alone to settle their own affairs. The imperial authority had to the last been maintained over most of the country lying between Ludhiana and Ambala, and round the headquarters of the *Sarkar*. On the fall of Sirhind, the whole of this rich tract fell into the hands of the Phulkian chiefs and their Manjha allies. The present Samrala tehsil and a small portion to the east of Ludhiana fell to the share of the latter, each chief and confederacy seizing as many villages as they could. The eastern boundary of the territory of the Rais had in the few years before the capture of Sirhind been quietly pushed eastwards from Baddowal, Dhandara, etc., so as to include the town of Ludhiana

20. *Ibid.*, pp. 276—80.

and all the villages towards the south and east up to within a few miles of Machhiwara. Their northern boundary was the river Satluj. The lowlands opposite them were held by the Kakar Sirdars and Diwans Mohkam Chand to the south of Ludhiana and to the north by Tara Singh Ghaiba (also a Kakar). There was then no *Bet* on this side. The Malaudh Sirdars had already established themselves in the south of Ludhiana tahsil (the *Jangal* villages and the country about Malaudh); and Sudha Singh Gil, an adventurer from Loharu in the Ferozepur district, secured a few villages around Sahnewal. With these two exceptions, the whole of the present uplands of Jagraon and Ludhiana tahsils with a considerable part of the Moga and Zira tehsils of Ferozepore, in all 1,360 villages, it is said, belonged to the Rais[21]. Samrala tahsil was divided: Sudha Singh Bajwa seized Machhiwara and the eastern portion of the Utalan *pargana* ; and the western half fell into the hands of the Ladhran Sirdars. In *pargana* Khanna some villages were held by a servant of Tara Singh Ghaiba who subsequently set up for himself at Khanna; and the rest was divided between Kheri, Bhari, Ajner, and Jabu Mazra Sardars and members of the Sontiwala and Nishanwala confederacies. Jassa Singh Ahluwalia of Kapurthala got 30 or 40 villages near Isru. Under the Rais the Grewals of Raipur and Gujarwal exercised some sort of local authority in the surrounding villages; but they were only "*malguzars*" or contractors for the revenue.

3. Change in the course of river Satluj.

About A.D. 1785, occurred a great change in the course of the Satluj, the whole of the area now known as the *Bet*, a tract over 80 kms. in length and 8 or 9 in width, coming to the district. It was at the time in the possession of the Kakars, Tara Singh Ghaiba, whose headquarters were at Rahon, having the upper and his brethren the lower portion; and these chiefs retained their possession except where Sudha Singh of Sahnewal seized some inhabited portions in front of his upland villages near Mattewara. There was then very little cultivation in the tract, the villages being few and far between. Most of the present ones owe their foundation to these chiefs and date from the period following the striking change in the course of the river.

4. State of the country during the period.

The Rais had a number of forts at different places and each Sikh chief erected one or two according to the size of his possessions. This partition of

21. Mixed up among the Cis-Satluj Sikh estates lay some Muslim and Rajput territories, the owners of which saved themselves by coalescing with the powerful Sikh leaders of their neighbourhood and paying them tribute. Rai Ilyas of Raikot retained most of the Ludhiana and Jagraon Tahsils and also a large portion of the Ferozepore District. His territory included several forts such as Tihara, Ludhiana, Sarih, Jagraon and Raikot. He was an ally of Raja Amar Singh of Patiala and commanded a force of 500 horse, 1,000 foot and a few pieces of cannon. (Hari Ram Gupta, *History of the Sikhs*, Vol. II, *Cis-Sutlej Sikhs*, 1769—1799, pp. 34—55).

the country appears to have been recognised by the various parties to it; and during the last forty years of the 18th century they do not seem to have attempted any encroachment on each other's territories but appear to have co-existed amicably.

The condition of the country during the period was one of considerable prosperity. The rule of the Rais is still spoken of as very mild, and it is said that they fixed only one-fourth of the produce as their due. The condition of the people was very much better at this time than it was subsequently under the followers of Ranjit Singh.

5. Incursions from across the Satluj and extinction of the power of Rais

Bedi Sahib Singh of Una.—The peace which prevailed in the country after the fall of Sirhind was interrupted by Bedi Sahib Singh of Una. He crossed the Satluj in A.D. 1794, with an army of Sikhs from the Jullundur Doab, proclaiming a religious war against the Pathans of Malerkotla. From this he was dissuaded by the ruler of Patiala, but in 1798 he again mounted a similar attack on the Rais of Raikot. Rai Ilyas was a minor; but his agent, Roshan Gujar, took a strong stand against the Sikhs at Jodhan, 16 kms. south-west of Ludhiana. He was, however, killed and Rai's army dispersed, but the Phulkian chiefs, who had always been on good terms with their Muhammadan neighbours of Kotla and Raikot and who had no intention of allowing the Bedi to establish himself in their midst, now came to the assistance of the Rai and drove the invaders out of most of the villages seized by them. The Bedi thereon invested the fort of Ludhiana; and the Rai called in the adventurer George Thomas from Hansi. On Thomas' approach, the Bedi retired across the river, and ceased to interfere in the country.

Maharaja Ranjit Singh's Cis-Satluj invasions and annexations.—The capture of Delhi in 1803 after the defeat of Marathas brought the English into direct contact with the Cis-Satluj chiefs because the area was believed to fall within their sphere of influence. Prompted by his ambition to bring the Sikh confederacies under his control, Maharaja Ranjit Singh extended his dominions to the north bank of the Satluj and began to think of conquest of the territory beyond it. The disputes between the States of Patiala, Nabha and Jind afforded him a good opportunity to meddle with their affairs. In July, 1806 he crossed the Satluj. The last of the Rais (Ilyas) had been killed while hunting in 1802. The family was represented by his widow, Bhagbhari, and his mother, Nur-un-Nisa. No opposition was offered to Ranjit Singh, who took possession of the town and fort

of Ludhiana, and made them over alongwith the adjacent villages to his nephew, Raja Bhag Singh of Jind. He proceeded to Patiala on pretence of settling the dispute between the three Phulkian chiefs and returned to the Punjab via Ambala and Thanesar. In the following year (1807) he was again invited by the disputants and, crossing at the Harike ford (Sobraon), he proceeded to Patiala, and thence into Ambala District where he besieged and took Naraingarh. In these two expeditions Ranjit Singh, besides stripping the Rais of all their territory save two or three villages given them for maintenance, also annexed the possessions across Satluj held by a widow, Rani Lachmi, of Sudha Singh (Sahnewal), as well as those of Tara Singh Ghaiba, also held by a widow, and the Kakar villages. The usurpation of the Ghaiba family was perhaps the most shameless of all these transactions, as Tara Singh had died in that very year while accompanying the Maharaja on his expedition. These conquests were divided by the Maharaja between himself and his adherents. Raja Bhag Singh of Jind got about 100 villages round Ludhiana and in the Bassian ilaqa, Sardar Fateh Singh Ahluwalia (ancestor of the Kapurthala chiefs), nearly the whole of the Jagraon tahsil and the Dakha *pargana* ; Sardar Gurdit Singh of Ladwa a number of villages about Baddowal ; Bhai Lal Singh of Kaithal, 16 villages about Gujarwal ; the Nabha chief some villages in Pakhowal while men of lesser note, such as the Sodhis of Nandpur got *jagirs*. Diwan Mohkam Chand was put in charge of the country reserved by Maharaja Ranjit Singh for direct rule.

6. The Rais of Raikot

The Rais of Raikot played such an important part in the history of the district that it will be of interest to give a more detailed account of the family. The Rais belong to the Mauj *got* or sub-division of the Rajput tribe ; and the ancestor of the Rais, Rana Mokal, is said to have come from Bhatner (or Jaisalmer) and to have settled in the area covered by the former Faridkot territory. Fourth in line from him was Tulsi Das, who embraced Islam in the reign of Emperor Ghiyas-ud-din Ghauri, as the family chronicle says, that is about the middle of the 12th century, and was called Sheikh Chachu. His sons, Bharu and Lapal, came to Hatur, a large village in the Jagraon tahsil, where they appear to have lived by plunder under the protection of an importunate Panwar Rajput called Udho. Popular tradition has it. "*Khaun piun Bharu Rai ; Pakara jana Udho Panwar*" which means that Bharu got the plunder, and Udho the blows. Finally Bharu made himself master of Hatur, while Lapal settled in the adjoining village of Shahjehanpur. Seventh in descent from Bharu was Kalha I, who took service with one of Delhi Emperors called Ala-ud-Din, perhaps the last of the Sayyid Dynasty, at all events in the beginning of the 15th century. Kalha founded Talwandi, to which place the family moved ; and obtained an assignment of the *malguzari* of villages in the neighbourhood, for which he had to pay Rs. 1,25,000 of revenue and also the title of Rai. The family

maintained its position as a feudatory of the empire (*zamindar mustajir*) under the Lodis and Mughals for several generations and one of the Rais is said by the family chronicle to have been put to death for refusing a daughter in marriage to Emperor Akbar.

On the decline of the Mughal empire from the beginning of the 18th century, the Rais became involved in disputes with the Governor of Sirhind, and Rai Kalha III, who appears to have been a ruler of very great ability, extended his power to Ludhiana, which passed into his hands a few years before the capture of Sirhind by the Sikhs. After the event he established independent power over the whole of Jagraon (the place of the Rais) and the greater part of Ludhiana tahsils, and also a large portion of the Ferozepore District. The family was on at least equal terms with the Pathan rulers of Malerkotla and the Phulkian chiefs, with the latter of whom their relations were friendly on the whole. It was in the time of Rai Ahmad, successor of Kalha III, that Raikot was founded (in 1648) ; and many other towns and villages, amongst them Jagroan, owe their origin to the family, whose rule appears to have been very mild. Rai Kalha III was the ablest of the Rais ; and under him the family reached the height of its power. He was followed by his son Ahmad, who ruled only for a short time. In 1779 Rai Ilyas, a minor, succeeded, and the affairs of the State were managed by two Gujars, called Roshan and Ahmed, the latter of whom asserted his independence at Jagraon, but was expelled.

It was at this time that the Sikhs from across the Satluj started their inroads under the Bedis. The celebrated Bedi Sahib Singh of Una, who four years earlier had devastated Malerkotla with sword and fire, swept down upon Raikot in 1798 at the head of a large force, announcing his determination to exterminate the kine-killing race whose presence polluted the land. Jagroan, Raikot and Ludhiana were speedily overrun, and a fierce battle was fought at Jodhan, where the Raikotias made a gallant stand under Roshan Khan ; but their leader was killed towards the close of the day, and victory remained with the Sikhs. The Bedi was, however, obliged ultimately to retire upon Ludhiana, pressure having been put upon him by the Phulkian Chiefs, whose aid the Raikotias had sought. The Sikhs of Ludhaina opened the gates of the city to the Bedi, but the fort held out, defended by Hassan Khan. It was regularly invested, and would no doubt have fallen had not Rai Ilyas in his last extremity sent for the celebrated George Thomas of Hansi, who was only too happy to fight when the loot was to be the reward. George Thomas was not, however, destined to draw his sword on this occassion, for the Bedi hastily raised the siege on hearing of his approach and betook himself to his home beyond the Satluj.[22]

Raikot had been saved from the ravages of the Bedi only to suffer at the hands of a more formidable foe. In 1806 Maharaja Ranjit Singh made his first

22. L. H. Griffin, *Chiefs and Families of Note in the Punjab* (edition 1940), Vol. I, pp. 217-18.

expedition into this part of the country. He took the opportunity of breaking up the Raikot chiefship on the plea of avenging Bedi Sahib Singh's defeat, and without a struggle dispossessed the Ranis of all their possessions, except a few villages, which were allowed for their maintenance. "From the plunder of this family" writes L.H. Griffin, "Raja Bhag Singh (of Jind) received the districts of Ludhiana, Jhandala, Kot, Jagraon and Basia [Bassian] including fifty-four villages of an annual rent of Rs. 23,260 ; Sardar Gurdit Singh of Ladwa, the districts of Badowal, with portions of Jagraon, thirty-two villages worth Rs. 23,450 ; Raja Jaswant Singh of Nabha, portions of Kot Basia [Bassian], Talwandi and Jagraon thirty-one villages worth Rs. 26,590 ; Sardar Fateh Singh Ahluwalia, portions of Shaka Kot, Jagraon and Talwandi, one hundred and six villages, worth Rs. 40,505 Diwan Mohkam Chand, portions of Ghila, Kot, Jagraon and Talwandi, seventy-one villages worth Rs. 33,945 ; Sardar Basawa Singh, ten villages, in Kot and Jagraon, worth Rs. 5,714 ; and Sardar Bhanga Singh, one village in Talwandi, worth Rs. 400".

Rani Nur-un-Nisa thus found herself left with only Raikot and portions of Mallah, Jhajewal, Hiran and Talwandi out of all the fertile country bequeathed her by Rai Ilyas Khan. Nur-un-Nisa was succeeded by Rai Ilyas Khan's widow, Rani Bhagbhari, who represented the interests of the family when the British fought the First Anglo-Sikh War (1845-46) on the Satluj, and helped them to the best of her power with carriage and supplies. On the death of Bhagbhari in 1854, the property passed to her nephew and adopted son, Rai Imam Bakhsh Khan. In lieu of *jagir* rights, he was awarded a pension of Rs. 2,400 with a *muafi* grant of one hundred acres in Raikot. He was loyal to the British during the "Mutiny" of 1857. His three sons received allowances aggregating Rs. 1,800 per annum. Faiz Talab Khan, the eldest son, retained the *muafi* grant. He was an Honorary Magistrate and a Provincial Darbari, and died in 1900. His son, Inayat Khan, represented the family during the forties of the present century[23]. On the partition of the Punjab in 1947, Rai Inyat Khan migrated to Kamalia (District Lyallpur) in West Pakistan.

C. MODERN PERIOD

I. Cis-Satluj Territory under British Protection, 1809-1845.

Interference of the British and the Treaty of 1809 : On the disappearance of the Napoleonic invasion of India, the British Government had made up its mind that further aggressions by Maharaja Ranjit Singh across the Satluj should be stopped and the Chiefs taken under British protection. Metcalfe was despatched to conclude a treaty with Ranjit Singh and joined his camp at Kasur in September, 1808. Immediately after this Ranjit Singh crossed the Satluj on his third

23. L. H. Griffin, *Chiefs and Families of Note in the Punjab,* (edition 1940), Vol. I, pp. 218-19.

A Tunnel Inside the Ludhiana Fort

invasion and attacked Faridkot and Malerkotla, notwithstanding the remonstrances of the young British envoy. After accomplishing his objects the Maharaja returned to Amritsar, and there Metcalfe communicated to him the decision at which the Government had arrived—that all conquests made in his first two expeditions before the arrival of the envoy might be retained, but that for the future the country between the Satluj and Yamuna was to be considered under British protection, and all territory seized during the last expedition be restored. To support this demand a force under Colonel Ochterlony was moved towards the frontier, and on February 18, 1809, the troops reached Ludhiana and took up a position there. It is hardly necessary to detail how Maharaja Ranjit Singh finally yielded to all the British demands and entered into the treaty of April 25, 1809, by which he and his dependants were allowed to retain all territory on British side of the Satluj acquired in 1806 and 1807. The occupation of Ludhiana as a military outpost was initially intended to be temporary ; but the troops were never withdrawn. The British had by the treaty taken under their protection all the Cis-Satluj chiefs, except those who had been brought into the country by Ranjit Singh ; and the management of British relations with the protected chiefs necessitated the appointment of a Political Agent and a force at this place.

General Ochterlony held political charge at Ludhiana from 1809 to 1815, and was succeeded by Captain Murray, after whom came Sir Claude Martin Wade (1823-38). Sir D. Ochterlony and Col. C. M. Wade enjoyed the full powers of agents. Ordinarily the charge of the post was required to be held by the Officer Commanding at Ludhiana.

It was General Ochterlony who gave the fort its present form and Ranjit Singh set up that of Phillaur to face it after the conclusion of the treaty of 1809. In 1835 Raja Sangat Singh of Jind died, and with him the direct line of the house failed. The escheat of the Jind territory, or at least of all that Ranjit Singh had bestowed on Raja Bhag Singh was claimed by the British ; but it was finally decided that Sarup Singh, a collateral of the late Raja, should succeed in the ancient possessions held by Raja Gajpat Singh and that all subsequent acquisitions should escheat to the British Government unless they had been granted by the Maharaja after the treaty of 1809[24]. By this decision the British acquired upwards of 80 villages round Ludhiana and Bassian, with a revenue of about Rs 1,00,000; and these formed the nucleus of the present district, the administration being carried on for the next ten years by the Assistant Political Agents at Ludhiana[25].

24. L. H. Griffin, *Rajas of the Punjab*, p. 34.

25. A list of the officers in charge is given on p. 306 of the *Rajas of the Punjab* by L. H. Griffin, and also on p. 41 of the *Ludhiana District Settlement Report* by Davidson.

British Campaign against the Gorkhas in the Simla Hill States: Shortly after setting up of the Political Agency at the place, the Political Agent at Ludhiana, Brig.-General Ochterlony, was called upon to organise and head the campaign against the Gorkhas, which was largely conducted from the headquarters of the Agency. Military action against Nepal was necessitated by persistent incursions of the Gorkhas in the Simla Hills as a part of their plan to extend their conquests westward from Nepal to Kashmir.

For this purpose, a strong force was assembled at Ludhiana with the active support of the protected Cis-Satluj Chiefs. The troops under General Octhterlony were required to co-operate with Major-General Gillespie, who was overall Incharge of the operations against the Gorkhas in the Nepalese War, 1814-1816.

Steps were taken by the Political Agent at Ludhiana to enlist the support of the subordinate chiefs, both in the hills and the plains, and to allay the apprehensions of Maharaja Ranjit Singh about the Gorkha encroachments accross the Satluj.

During the operational phase, 1814-1816, General Ochterlony had to leave Ludhiana; but the Political Agency continued to function under his directions until his return on the successful completion of the campaign in the Western Himalayas.[26]

The Kabul War : The conclusion of the Tripartite Treaty among the East India Company, Shah Shuja-ul-Mulk and Maharaja Ranjit Singh in 1838 placed a heavy responsibility upon the British authorities, who were committed to the placing of a friendly ruler on the throne of Afghanistan as much in their own interest as in that of the exiled Shah, the pensioner at Ludhiana.

As the initiators of the Tripartite scheme, the organisation and execution of the expedition to Kabul devolved on the Political Agent at Ludhiana. Thus plans had to be drawn up both on behalf of the British Government and Shah Shuja-ul-Mulk, their protege, who had no resources of his own.

26. The voluminous records relating to the campaign were salvaged from the office of the Commissioner, Ambala, where these might have been transferred from Ludhiana on the merger of the Ludhiana Agency with the N. W. F. Agency at Ambala in 1840. The documents covering some 2,000 sheets mainly pertain to the preparations made at Ludhiana for the execution of the campaign against the Gorkhas in the preparatory stage, 1809—1814.

The papers are at present available at the Punjab State Archives, Patiala. For detailed information about the papers refer to "*British Campaign Against the Gurkhas in the Simla Hill States*" by V. S. Suri, Keeper of Records to Government, Punjab, published in the *Proceedings of the Indian Historical Records Commission*, Vol. XXXIV, Pt. II, Trivandrum, December, 1958.

As soon as a blue-print of the exepedition had been prepared, the Political Agent at Ludhiana set about the task of collecting adequate forces, supplies and stores required for the fateful expedition.

Alongside arrangements for the Kabul expedition, the Political Agent at Ludhiana had also to attend to the recruitment of troops and procurement of supplies for the Afghan King (Shah Shuja-ul-Mulk). A special officer had to be appointed for the purpose. His terms and conditions of service were specified.

In addition to the recruitment of troops on his behalf, steps were taken for the employment of sufficient number of *palki*-bearers for the female members of his family and maid-servants. For the carriage of *palkis* from Ludhi ana to Kabul, large number of bearers were recruited at the rate of Rs. 6/- p. m. for *kahar* and Rs. 9/- p. m. for the mate. On return from Kabul the bearers were to receive a reward of Rs. 9/- per head and the mate Rs. 13/8/- For every batch of 50 *kahars* of or bearers, one mate or *Sirdar* was to be appointed.[27]

The establishment of the Political Agency at Ludhiana further contributed to the importance of the town situated at a strategic point on the highway to Central Asia. Political relations with the kingdom of Lahore were routed through the Agent to the Governer-General at Ludhiana and a Vakil, Rai Kishan Chand Bhandari, was posted there to look after the interests of Lahore Darbar. Tactful handling of several complicated matters of the treaty of Amritsar, 1809, by Col. C. M. Wade, who was able to win the confidence of Maharaja Ranjit Singh through mutual regard and understanding, greately helped to change the relations between the two Governments from undisguised hostility to close friendship and accord. Gradually, on settlement of disputed claims to territory, Maharaja Ranjit Singh showed distinct softening of attitude towards the Political Agents at Ludhiana. Frequent exchange of presents and visits of representatives further developed cordial friendship and amity. Ludhiana thus became the centre for all political dealings with the Lahore Darbar.

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27. The elaborate preparations necessitated in this regard are clearly revealed by a mass of official documents arranged under the head "*The Kubul War*". The collection of huge bulk of records on the subject was discovered at the Commissioner's Office, Ambala, where the papers appear to have been sent from the Ludhiana Agency from which these had originally emanated.

Detailed study of the documents gives a clear idea of the magnitude of the task undertaken by the Political Agent and the importance assumed by Ludhiana in connection with the organisation of the expedition to Kabul.

The documents are extant at the Punjab State Archives, Patiala.

For a critical appraisal of the papers consult article "*The Kabul War*" (*February*, 1837 *to September*, 1840) by V. S. Suri, Keeper of Records to Government, Punjab, published in the *Proceedings of the Indian Historical Records Commission*, Vol. XXXV, Part II, New Delhi, February, 1960.

On the assumption of direct administration of considerable territory around Ludhiana, the district formed thereby was given due attention for its rapid growth and development. The town soon became a flourishing centre of trade and commerce on account of the incentives offered by the Political Agent as a result of the removal of transit duties among the Cis-Satluj Chiefs and development of local industries through the rehabilitation of Muslim artisans who had migrated en masse from Kashmir on the occurrence of frequent famine in the valley.

The presence of a large number of Afghan refugees at Ludhiana, especially the Durrani princes, who enjoyed pensions from the British Government, added to the political importance of Ludhiana. The Political Agency maintained contact not only with the Government of Lahore but also with the whole of North-Western region, including Sind and Afghanistan. Most of the Cis-Satluj chiefs kept their Vakils at Ludhiana or sought information about political developments through knowledgeable unofficial sources. Syed Moulvi Rajab Ali, *Serishtadar* to the Polictical Agent at Ludhiana, who himself hailed from Jagraon, managed the office of the Agency for a number of years and had become well known among the Cis and Trans-Satluj Chiefs. He played an important role in the British relations with the Lahore Darbar. Foreigners intending to proceed to Lahore were required to get regular permits from the Political Agent in consultation with the Darbar Vakil. Ludhiana continued to be focus of political activities and functioned as an important military station until Ferozepore was developed as a cantonment.

Apart from the political, military and industrial significance of Ludhiana as the seat of Political Agency, the station also became the centre of Missionary activity, presumably under the patronage of the Political Agent. The American Presbyterian Mission had made the place its headquarters in the thirties of the last century and had undertaken the publication of Christian literature in Punjabi (Gurmukhi)through the first ever Punjabi printing press set up at Ludhiana. Some of the earliest Punjabi publications on Christianity date back to the period of the Political Agency at Ludhiana.

Circumstances leading to the First Anglo-Sikh War.—The death of Maharaja Ranjit Singh in 1839 was followed by serious disturbances and disorder. Without going into the details of the circumstances, which led to the outbreak of the First Anglo-Sikh War, a short notice of the British position south of the Satluj is called for, as the neighbourhood of Ludhiana was the scene of part of the struggle between the British and the Khalsa army, and the position was throughout of the first importance. Up to 1838, Ludhiana was the only British outpost on the Punjab frontier ; but in that year a large force was assembled at Ferozepore for the invasion of Afghanistan, and the new military station pushed Ludhiana into a secondary place. being within easier reach of Lahore. Ferozepore and

the territory around it had lapsed to the British on the death of Rani Lachman Kaur in 1835, and about 1838 Sir George Russel Clerk, the Governor General's Agent at Ambala, built the residency at Bassian, a point from which communications could readily be maintained and control exercised over the Phulkian chiefs. On the withdrawal of the army from Afghanistan in 1842, the position of the British in the Cis-Satluj territory west of Ambala was : the British had two patches of territory on the Satluj in the neighbourhood of Ludhiana and Ferozepore, which were completely isolated, and surrounded by the possessions of the Lahore Darbar and its feudatories.

Sojourn of Afghan Kings at Ludhiana.—On the decline and fall of the Durrani kingdom, the course of event made the Barakzai brothers virtual masters of Afghanistan, and forced its rulers, Zaman Shah (1793—1800) and Shah Shuja-ul-Mulk (1803 —1809), to take refuge in India. After being overthrown, captured and blinded in 1800, Zaman Shah managed to escape to Bokhara, Herat and finally to Ludhiana. For the rest of his life he lived in India, a striking and pathetic figure, as a pensioner of the East India Comapny.

Shah Shuja was defeated and replaced by Mahmud Shah in 1809. After years of wandering, sordid intrigue and misfortunes, he finally escaped from Lahore to Ludhiana in September, 1816, where he placed himself under British protection and became their pensioner. In 1834, he made an abortive attempt to regain his throne, but Dost Muhammad Khan proved more than a match for him.

Having lost his eyesight, Zaman Shah had become religious-minded, and devoted himself to God and saintly persons. On hearing about the great name and fame of the holy Maulana Shah Abdul Qadir,[28] the ex-king, about the year 1836, personally went to pay him respects at his village Ballianwal (tahsil Ludhiana), where he stayed for a week or so. While taking leave for departure, Zaman Shah prevailed upon Shah Abdul Qadir to shift to Ludhiana to enable him as also the people in general to be benefited by him educationally and spiritually. On shifting to Ludhiana, this holy personage built for himself a *kacha* house and a thatched mosque in Mochpura, the poorest quarter of the town. This historical mosque came to be later on known as Masjid-do-manzli (Double-storyed-Mosque). The service of its first *Muazzan* (one who calls to prayer) was performed by the Afghan ex-king Zaman Shah. From his residence at a distance of about two furlongs, Zaman Shah would go there daily five times to say prayers (*namaz*) which he would do on bare ground without any carpet.

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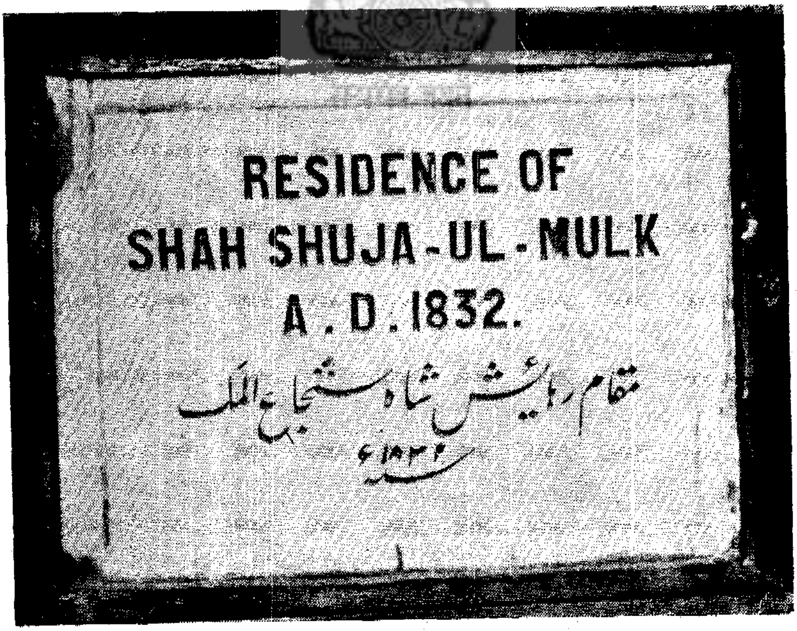
28. Shah Abdul Qadir was the son of Maulana Abdul Waras of village Ballianwal, tahsil Ludhiana. In 1796, he proceeded in pursuit of education to Delhi where he joined the school of Maulana Shah Wali-ulla Dehlvi. After completing his education, Abdul Qadir returned to his native place in 1825 and engaged himself in the propagation of learning.

(Aziz-ur-Rehman, *Raees-ur-Ahrar Maulana Habib-ur-Rehman Ludhianvi aur Hindostan ki Jang-i-Azadi*, p. 59).

Erstwhile Residence of Shah Shuja-ul-Mulk



Stone Inscription at the Erstwhile Residence

During their sojourn at Ludhiana, both the ex-kings, Zaman Shah and Shah Shuja, lived like princes and held regular court. They also had with them a portion of the Afghan army. At a short distance from his residence in the building now occupied by the Head Post Office[29] at Ludhiana, Shah Shuja had built a small mosque, known as Shahi Masjid.

Incidentally Maulana Shah Abdul Qadir came to know that the families of Zaman Shah and Shah Shuja did not enter into matrimonial relations with one another, and (in the absence of any other bridegrooms worthy of their own dignity and status) kept their daughters unmarried. So, in quite an informal way, he went to their court where he was provided with an equally raised seat by the side of the ex-kings. Addressing both Shah Shuja and Zaman Shah, the Maulana emphasised on them the prime necessity and religious importance of marrying their daughters. Shah Shuja instantly flared up at this reference to the affairs of their daughters and drew out his sword. But, in the very next moment, he realised the folly of his rash act before a saintly personage, and, begging his pardon, explained that they had to keep their daughters unmarried to maintain their dignity and high status, for want of suitable bridegrooms. When Zaman Shah heard what was going on, he felt all the more grieved and ashamed at the unfortunate incident. Begging pardon from the holy personage for what had happened, he offered to marry his daughter to the son of Shah Shuja, and, a few days later, the marriage ceremony was performed by Shah Abdul Qadir. The incident spread the name and fame of the holy Maulana far and wide[30].

Ultimately, during the second half of the third decade of the 19th century, circumstances arose which impelled the British to replace Dost Muhammad Khan by Shah Shuja on the Kabul throne. In pursuance thereof, the Tripartite Treaty of 1838 was concluded among the British, Shah Shuja and Ranjit Singh. The Lahore ruler signed the treaty on June 26, 1838. The Governor-General, Lord Auckland, before signing it sent the draft to Shah Shuja at Ludhiana through Macnaughten, Wade and Mackeson, who arrived there on July, 15, 1838. The Shah objected to various articles, but he secured various assurances from the British Government, and on July 17, 1838, the mission left Ludhiana with the signed treaty[31]. Shah Shuja raised his contingent of 6,000 at Ludhiana, and, through the combined help of the British and the Sikhs he was placed on his ancestral throne on August, 7, 1839.

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29. The building in which Shah Shuja lived at Ludhiana is just in front of the Bhadaur House, at a short distance from the Clock Tower.

30. Aziz-ur-Rehman, *Raees-ur-Ahrar Maulana Habib-ur-Rehman Ludhianvi aur Hindostan ki Jang-i-Azadi*, pp. 11-14.

31. H. H. Dodwell, *The Cambridge History of India*, Vol. V, *British India*, 1497—1858, pp. 495—96.

Do Manzli Masjid, Ludhiana

Early in November, 1840, Dost Muhammad Khan surrendered himself to the British envoy, Macnaughten. He was cordially received and sent to Calcutta on November 12, 1840, under a strong escort[32]. Enroute, when Dost Muhammad Khan halted on the bank of the Satluj near Ludhiana and heard of the great name and fame of Maulana Shah Abdul Qadir, he went to pay his respects at the Masjid-do-manzli in Mochpura. The learned saint consoled the Amir on the loss of his throne and assured him that Shah Shuja would not be able to carry on the government, and that the British would have to ultimately restore to him his throne and kingdom[33]. This actually came to pass. Shah Shuja was murdered on April, 5, 1842. Dost Muhammad Khan and other Afghan prisoners with him were released from Calcutta and allowed to return to Afghainstan. On his occupation of the Kabul throne in 1843 after Shahpur (son of Shah Shuja) had fled to Peshawar, the British Government recognised him as the rightful king[34]. On his way back to Kabul at Ludhiana, Dost Muhammad had again gone to pay his respects to Shah Abdul Qadir whom he begged to accompany him to Kabul. Expressing his inability to accede to his request, the Maulana urged the prince to act upon the tenets of Islam and rule peacefully with justice and mercy[35].

The Wahabi Movement in Ludhiana.—Wahabism made its appearance in India in early 19th century as a religious reform movement in Islam in order to purge the pristine faith of the "religious corruptions" which had crept into Muslim society. In India it had a special appeal, as many of the converts from Hinduism had brought over into their new faith ideas and practices which were contrary to the spririt of Islam. Wahabism fiercely advocated a return to the "simplicity of faith (and society) of the Prophet's Arabia[36]" and rejected" all accretions to and declensions from the pure Islam". The movement, however, soon transformed itself into a religio-political creed and it was the ambition of its founder, Saiyed Ahmad of Rai Bareilly (1786—1831), to revive and restore Muslim power in India by bringing about the overthrow of the Sikhs in the Punjab and the British in Bengal. Fired with the new missionary zeal, the Wahabi leaders toured the length and breadth of the country to stir up the Muslim masses and to appoint provincial and district agents in different parts of the country. The hey day of the revivalist movement lasted from 1820-1870.

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32. R. C. Majumdar, *The History and Culture of the Indian People*, Vol. IX, *British Paramountcy and Indian Renaissance*, Part I, pp. 183-84.

33. *Aziz-ur-Rehman, Raees-ur-Ahrar Maulana Habib-ur-Rehman Ludhianvi aur Hindostan ki Jang-i-Azadi*, pp. 14-15.

34. R. C. Majumdar, *The History and Culture of the Indian People*, Vol. IX, *British Paramountcy and Indian Renaissance*, Part I, pp. 198-99.

35. Aziz-ur-Rehman, *Raees-ur-Ahrar Maulana Habib-ur-Rehman Ludhianviaur Hindostan ki Jang-i-Azadi*, pp. 14-15.

36. W. S. Blunt, *India under Ripon, a Private Diary*, Vol. I, p. 16.

Saiyed Ahmad did not meet with much success against the Sikhs in the North West Frontier, and he was killed in a battle at Balakot in 1831. The death of Saiyed Ahmad was a great blow to the movement, but the four Patna *Khalifas* or spiritual vice-regents, appointed by him, namely, Vilayat Ali and his brother Inayet Ali, Shah Muhammad Hussain, and Farhat Hussain, not only kept it alive but also made it even more vigorous in a few year's time. On the lines of the Central Committee at Patna, everyone of the "friendly" districts had committees to discuss matters concerning the *jihad*, and permanent preachers. Their zeal was intensified from time to time by the visits of itinerant missionaries.

The Wahabis renewed their hostile activities against the Sikhs during the troubled period following Maharaja Ranjit Singh's death. They only temporarily surrendered to the British at Haripur after the establishment of the British Residency in the Punjab in 1847[37].

As in many other districts of the Punjab, the Wahabis had made Ludhiana an important centre of their activities. Firstly, Ludhiana was situated on the high road from Patna and other Wahabi centres in India to Sittana camp across the Punjab, and Ludhiana Muslims had all through been in the forefront of such movements. Secondly, the famous Maulana Shah Abdul Qadir of Ludhiana had been intimately associated with Saiyed Ahmad for a long time during his educational activities and organisation of the Wahabi movement. In 1836, the widow of the Wahabi chief addressed three letters to Shah Abdul Qadir, which are still in possession of the latter's descendants[38].

In September, 1849, Vilayet Ali marched towards Sittana, preaching *jihad* in every large town he visited on the way. By stages he reached Khanna, from where he was escorted by his brother, Inayer Ali, to Sittana[39]. This time or during some previous frontier expedition, Vilayet Ali is said to have stayed on his way from Patna at Ludhiana for about a month[40]. Vilayet Ali died in 1852, after which Inayet Ali became the undisputed leader. The Wahabi consipiracy, however, was gradually stamped out from India as a result of trials and other vigorous measures by the British.

The Wahabi movement was much better planned, organised and controled than the great uprising of 1857. Though, due to a variety of reasons, the

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37. R. C. Majumdar, *The History and Culture of the Indian People*, Vol. IX, *British Paramountcy and Indian Renaissance*, Part I, pp. 883-84, 887—89, 896-97.

38. Aziz-ur-Rehman, *Raees-ur-Ahrar Maulana Habib-ur-Rehman Ludhianvi aur Hindostan ki Jang-i-Azadi*, pp. 15—16.

39. R. C. Majumdar, *The History and Culture of the Indian People*, Vole. IX, *British Paramountcy and Indian Renaissance*, Part I, pp. 889-90.

40. Aziz-ur-Rehman, *Raees-ur-Ahrar Maulana Habib-ur-Rehman Ludhianvi aur Hindostan ki Jang-i-Azadi*, p. 16.

Wahabis did not play conspicuous role in 1857, some of the prominent rebels were the Wahabis[41].

The Satluj Campaign, 1845-46.—In December, 1845, the Khalsa army crossed the Satluj, and the First Anglo-Sikh War commenced. The Chief interest centred round Ferozepore which was the key point of the Sikh attack, since at the newly-developed military station the bulk of the British troops were mustered. They had been despatched there marching direct via Bassian, while Ludhiana was left with a mere garrison. But the strategic station could not be neglected, as it covered the communication in the British rear. Its importance was rightly appreciated by the Sikhs, for in January, 1846 their general, Ranjodh Singh Majithia, created a diversion by appearing with an army at Phillaur and crossing the Satluj. His force consisted of 10,000 infantry, with 60 guns and some cavalry. His presence on the eastern side of the Satluj was fraught with the greatest danger to the British as in a struggle with the subjects of the Lahore Darbar the British could at most expect little better than neutrality from their co-religionists of the Cis-Satluj region. The position of such chiefs as had territories on both sides of the Satluj scarcely left them a choice. Nihal Singh Ahluwalia of Kapurthala tried to play a double game. His troops fought against the British about Ferozepore, and a considerable body of them joined General Ranjodh Singh near Ludhiana while their master was professing friendship to the British, and saying that he had no power over them. The Ladwa Chief, whose headquarters were at Baddowal, and who had everything to lose by such conduct, openly went over to General Ranjodh Singh while he was still on the Jullundur side of the river.

Action at Baddowal.—The Ludhiana garrison had been reduced to such straits that the Ladwa chief was able before crossing to burn a portion of the cantonments, and no attempt was made to bar the passage of Ranjodh Singh's army which held British communications at its mercy. Such a state of affairs was not likely to last long; and Sir Harry Smith was soon despatched from Ferozepore with a force of about 4,000 men to keep open the road to Ludhiana. On January 20, 1846, he reached Jagraon, while Ranjodh Singh occupied Baddowal. Sir Harry Smith's object was to effect a junction with the Ludhiana garrison without coming into collision with the enemy, and he accordingly attempted to pass to the south of their position. But his flank was attacked on January 21 (1846) by the Sikhs with great violence near Baddowal and the British troops, wearied with a long march, were for some time in considerable danger. They were with great difficulty extricated from the position and brought into Ludhiana with a loss of 200 men and nearly the whole of the baggage. This action was most damaging to British prestige; but its disastrous effects had not yet been fully realised before they were effaced by the British success.

41. R. C. Majumdar, *The History and Culture of the Indian People*, Vol. IX, *British Paramountcy and Indian Renaissance*, Part I, pp. 890-91, 894—896.

Battle of Aliwal.—On the 22nd January, 1846, Ranjodh Singh moved to Bhundri on the Satluj where he was joined by some regular troops of the Lahore army, his strength being thus raised to 15,000; and here he remained quietly for a week, having, as he hoped a clear line of retreat, commanding the road along the Satluj between Ferozepore and Ludhiana. General Smith was also reinforced and on the 27th January, 1846, marched against the Sikhs. He found them posted in the low land close to the Satluj, with their right resting on the village of Bhundri, on the high bank, and their left on Aliwal, close to the river. East of Bhundri the ridge, which separates the valley of the Satluj from the uplands, sweeps inwards in a semicircle crowned with villages at intervals for five or six miles, and leaves a wide open plain between it and the river. Across this plain the British army on the morning of 28th January, 1846, moved to the attack, the capture of Aliwal, the key of the Sikh position, being their first object. The Sikhs guns were as usual well served; but Aliwal was held by inferior troops who made a spiritless resistance. By the capture of Aliwal the left flank of the Sikhs was turned, but round the village of Bhundri, their right, composed of trained and enthusiastic Khalsa troops (Avitabile's regiments) made a most determined stand, and the battle is called by natives "the fight of Bhundri". The most gallant part of the action was the charge by the 16th Lancers of the unbroken Sikh infantry, who received them in squares. Three times the Sikhs were ridden over, but they at once reformed on each occasion and it was not till the whole strength of British army was brought to bear that they were at length compelled to turn. The Sikh troops were either driven across the river, in which many were drowned, or dispersed over the uplands. The British loss was very heavy, amounting to 400 men killed and wounded. A tall monument, erected by the British in the centre of the plain to the memory of those who fell, marks the scene of the action.

Close of the Campaign and annexation of the Cis-Satluj possessions of the Lahore Darbar.—The battle of Aliwal cleared the upper Satluj of the Sikh troops, rendered British communications secure and enabled Sir Harry Smith to join the army of the lower Satluj with his force. On the 11th February, 1846, with the British victory at Sobraon the First Sikh War ended. The abrogation of the Treaty of 1809, and the annexation of all Lahore territory on this side of the river, were its natural results; and it remained to be seen how the Cis-Satluj chiefs, who had either actively opposed the British, or had withheld their assistance when it was most needed by them, were to be dealt with. The Ladwa Chief forefeited all his possessions, and the Ahluwalia chief all those on the eastern side, while the Nabha Raja lost one quarter of his territory[42]. Only such of the minor chiefs as had not openly joined the Sikhs were maintained

42. L. H. Griffin, *The Rajas of the Punjab*, pp. 206-207.

in their possessions as *jagirdars*, independent power being given only to the Phulkian States and the Malerkotla Nawab[43]. Where the chief had gone agianst the British, his villages were confiscated. From these acquisitions was formed in 1847 the present Ludhiana District, after making Wadhni as headquarters for a short period as an experimental measure.

Events from 1846 to 1857.—The work of settling the new British possessions was taken up after the conclusion of the campaign of 1846.

In 1849, after the annexation of the Punjab, Ludhiana ceased to be of much importance as a military station. The cantonments were finally abandoned in 1854, and the fort was garrisoned by half a company of Native Infantry. During the ten years after the Satluj Campaign (1845-46), the work of administration progressed steadily and the resources of the district were developed rapidly. A summary assessment in 1846-47 of the new acquisitions was followed in 1849-53 by a Regular Settlement of the whole district. Cultivation increased and trade began to flourish in consequence of the removal of the transit duties and improvement of communications.

II. THE GREAT UPRISING OF 1857[44]

At the time of the Great Revolt of 1857, Ludhiana District formed a part of the Cis-Satluj Division, which was subsequently rechristened as the Ambala Division. Mr. G. H. M. Ricketts was the Deputy Commissioner, Ludhiana, and Mr. G. C. Barnes was the Commissioner and Superintendent, Cis-Satluj States, during the critical period. A brief account of the happenings in the district is given here for the benefit of the general reader.

1. **Peculiar position of Ludhiana.**—The town of Ludhiana is situted on the high road from Delhi to the Punjab. It stood on the bank of the Satluj at the head of the bridge-of-boats connecting Hindustan with the Punjab proper. The inhabitants mainly comprised a dissolute, lawless mixed population of Kabul pensioners, Kashmiri shawl-workers, Gujars, Baurias and other predatory races. There was a fort without Europeans to guard it, a city without regular troops to restrain it, a district traversed by roads in every direction, linking the seven commercial towns which formed the emporia of its trade, and situated on a river which for months in the year is a mere network of fordable creeks which could only be guarded by a cordon of regular troops.

43. A full account of the treatment of the petty chiefs whose territories were not confiscated is found in "*The Rajas of the Punjab*" by L. H. Griffin.

44. For a detailed account of the Mutiny of 1857, refer to a report on the events in Ludhiana District, from G. H. M. Ricketts, Deputy Commissioner Ludhiana, to G. C. Barnes, Commissioner and Superintendent, Cis-Sutlej States, dated 22nd February, 1858, published in "*Punjab Government Records*", Vol. VIII, *Mutiny Reports*, Part I, pp. 85—126.

The Deputy Commissioner, Ludhiana, Mr. Ricketts, had thus a most difficult part to play. He had for his jail and treasury guard a disaffected detachment of the 3rd Native Infantry, and, on the out-break of the revolt, received another company of the same regiment. Since no reliance could be placed upon these men, the Deputy Commissioner made a special request to the feudal chiefs and the independent States to send him troops. The chiefs of Nabha and Malerkotla sent in their men, tow hom the safety of the station was entrusted. Detachments of these troops were likewise charged with the protection of the eight high roads that intersected the district, on the ferries, the fords and the *ghats*. The Nabha troops, however, failed Mr. Ricketts in his hour of need. They did not show any enthusiasm to apprehend the Jullundur rebels.

The other prominent persons who actively aided the Deputy Commissioner were Sardar Mith Singh, the most influential of the Maloudh Chiefs, Sardar Basant Singh of Kheri, the Chaudhris of Lalton and of the Kabul pensioners, Hassan Khan, Abdul Rahman, Saleh Muhammad, Shahpur and Shahzada Sikandar.

2. **Measures for the preservation of public peace.**—On the 15th May, Mr. Ricketts sent his treasure to the Phillaur fort, where it was lodged under the keeping of Her Majesty's 8th Foot, who formed the garrison there. It was placed under the charge of Mr. Thornton, Assistant Commissioner.

Mr. Ricketts, assisted by Lieutenant Campbell of the 9th Irregular Cavalry, who was then quartered at the station, Captain Cox of the Engineer Department, and Lieutenant Yorke, Commanding Detachment of the 3rd Native Infantry, used to patrol the city and its environs every night, at any time between 10 p.m. and 2 a.m.[45]. Captain Nicolls, Assistant Commissioner, was entrusted with the duty of forming a Sikh regiment, which the Chief Commissioner ordered to be raised.

3. **Situation before the Uprising.**—The Native troops in Ludhiana in 1857 consisted of 130 men of all ranks. Their conduct contained the same inexplicable mixture of contradictions apparent in most corps throughout the disturbances. They escorted the Siege Train across the Satluj through the heavy sand, though when the train of guns was on the bridge-of-boats it was entirely at their mercy, and though they had previously formed a plan to possess themselves of Phillaur Fort and magazine, in which they were fortunately anticipated by the sudden advent of an European detachment only 18 hours before their plan was to have been put in execution ; they escorted ammunition right

45. *Punjab Government Records*, Vol. VIII, *Mutiny Reports*, Part I, p. 97.

down to Delhi camp ; they were extremely civil and obedient to their own officers, and even after they were in open mutiny, and had threatened to fire on Captain Rothney and the 4th Sikhs, they allowed their officer (Lieutenant Yorke, killed at Delhi) to be with them, and showed him no insult. Of the two men of the regiment who met their death in Ludhiana, one was a Jhelum Mussulman, caught as a spy ; another, who attempted Lieutenant Yorke's life, and was shot by him, was a young Manjha Sikh[46].

4. **Encounter with the sepoys from Jullundur.**—Mr. Thornton, Assistant Commissioner, had ridden over (on 8th June) from Ludhiana to Phillaur to pay the regiment there. He had learnt that the troops at Jullundur had risen. He pushed on with all haste to the river-bank and cut off the bridge of boats. Hurrying back to Ludhiana, he found that Mr. Ricketts, the Deputy Commissioner, had also received by telegraph information of the revolt at Jullundur,[47] and to that end was already making such preparations as best as he could for the security of that important post. Lying on the great high road from the Punjab to Hindustan, it was to be readily assumed that the mutineers would sweep through the town, carrying destiuction with them, on their route to the appointed goal of Delhi. In the face of the menacing situation Mr. Ricketts could be expected to do very little, but that little was made less by the fact that the news of the Jullundur uprising had reached the Sipahis at Ludhiana almost as soon as it had reached the Deputy Commissioner. The Sipahis were not less prompt in action. They were waiting for the signal and ready to strike. Their first movement was to seize the Fort and the Treasury. There were no European troops, so this was easily accomplished. The situation was one of infinite peril. The mutineers from Jullundur and Phillaur might be expected any hour. But the Satluj was still between them, and if Ricketts could guard the passages of the river only for a little while, the pursuing column might come upon the fugitives before they had crossed. The 4th (Rothney's) Sikh Regiment had reached Ludhiana that morning after a long and weary march. Three companies under Lieutenant Williams, were now told off for service, and the Raja of Nabha was called upon for a contingent. The chief sent detachments of horse and foot, with two six-pounder guns, and with these Ricketts went out to dispute the passage of the river.

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46. *Punjab Government Records*, Vol. VIII, *Mutiny Reports*, Part I, pp. 100-101.

47. Regarding the receipt of first intelligence of outbreak at Jullundur, G. H. M. Ricketts, Deputy Commissioner, Ludhiana, wrote to G. C. Barnes, Commissioner and Superintendant, Cis-Sutlej States, that "The First intelligence of the outbreak at Jullundur was conveyed to me by telegraph from Umballa from yourself. The signaller at Phillour was hopelessly drunk so he never heeded the singals from Jullundur ; fortunately, as a last resource, the Jullundur man communicated direct at 10 A.M., on 8th June before I received your order On the receipt of the news I could scarcely credit it, not understanding why I had received no information direct from Phillour ; but doubts were soon settled by the hasty arrival of the Assistant Commissioner, Mr. Thornton, who had fortunately been that morning to Phillour for treasure to pay these very troops ; he had seen the Jullundur mutineers, had cut the bridge of-boats, and hastened to me with the news." (*Punjab Government Records*, Vol. VIII, *Mutiny Reports*, Part I, p. 102).

"The first thing was to ascertain the exact position of the enemy. So Rieketts, crossing the river in a ferry-boat walked along the opposite bank to Phillour, and there learnt that the insurgents having been baulked by Thornton's destruction of the bridge, had made for a *ghaut*, some four miles higher up, at a narrow bend of the stream, and were preparing for the passage of the Sutlej.[48] Possessed of this important information, the gallant civilian recrossed the river rejoined the detachment, and, in concert with Lieutenant Williams, made his arrangements to check the advanc of the mutinous regiments. Had Johnstone, with the Europeans, been in pursuit of the mutineers, the enemy would have been between two fires, and the bulk of them would have been destroyed. But the Brigadier made no sign; and so Ricketts and Williams had all the work and all the glory to themselves. It was ten o'clock at night when they came within sight of the Sipahi regiments. The road was bad, the sand deep, the ditches numerous. Their guides had misled and deserted them, and much good time had been lost. The main body of the enemy, some sixteen hundred in number[49] had already crossed, and our little handfull of Sikh troops now came suddenly upon them. Ricketts, who improvised himself into a Commandant of Artillery, took charge of the guns, and Williams directed the movements of the Cavalry and Infantry. The guns were at once unlimbered, but the horses of one of them took fright and fled, carrying the six-pounder with them. The other gun, a nine-pounder, was well served, and before the enemy knew that we were upon them, it delivered a round of grape with good effect, whilst at the same time William's Sikhs poured in two destructive volleys. The mutineers returned the fire, and then the Nabha troops turned their back upon the scene and fled like a flock of sheep. For some time the unequal contest was nobly maintained. Round after round from the one gun was poured in so rapidly and so steadily, that practised ears in Johnstone's camp, on the other side of the river, thought that they discerned the utterances of two or three field-pieces; whilst at the same time the Sikhs, spreading themselves out so as not to be outflanked by superior numbers, poured in volley after volley with destructive effect. But gallant as were these efforts, they could not last. During well-nigh two hours they kept back the surging multitude of the enemy; but then the gun ammunition was expended. The cartridges of the Sikhs had been nearly fired away; Williams had fallen, shot through the lungs; and the midnight moon revealed, with dangerous distinctnes, the position of our little band. There

48. "......at the Lussara Ferry, four miles above Phillour, the advanced guard of the mutineers managed to seize a boat that was on the Jullundur side, and, crossing over in numbers, took possession of the other also ;.........." Report of G. C. Barnes, Commissioner and Superintendent, Cis-Sutlej States, Ambala. (*Punjab Government Records*, Vol. VIII, *Mutiny Reports*, Part I, p. 13) .

49. "The greater part of the three regiments of Infantry and one regiment of Cavalry, but without guns."

was nothing, therefore, left for Ricketts but to draw off his force and return to the British Cantonment.[50]"

"........ the mutineers, after an hour or two, again concentrated at the *ghaut*. The next morning (9th June) they threw their dead into the river, so the number of their casualties could not be ascertained; villagers in the neighbourhood and prisoners estimated the killed variously from 45 to 65 men; 10 dead bodies were found stranded on the bank on the next day[51].

5. **The Uprising at Ludhiana, 9th June.**—"Then the mutinous regiments, no longer obstructed or opposed, swept on to Lodiana. About an hour before noon, on the 9th of June, they entered the city. The company in the Fort fraternised with them. The turbulent classes rose at once, scenting a rich harvest of rapine, and for a little while disorder and destruction were rampant in the place. There were some peculiar elements in the population of Lodiana from which danger was ever likely to flash out in seasons of general excitement.[52] Large numbers of aliens were there. Foremost amongst these were the Kabul refugees—the miserable incapables of the Saduzai Family............Then there was the great colony of Kashmir-shawl weavers[53], who, sheltered and protected as they never could have been elsewhere, followed their eaceful calling unmolested, and held their gains in the most perfect security. Both of these classes now rose against us [British] with a vehemence proportioned to the benefits they had received[54]." The Kabulis were "conspicuous in the outrage and plunder committed in the city[55]"; and the Kashmiris were among the foremost in "plundering the Government stores, in pillaging the premises of the American Mission, where many of them had received their education; in burning churches and buildings; in destroying the printing presses and stores of books; and in pointing out the residences of Government officials or known well-wishers of Government as objects of vengeance for the mutinous troops.[56]'

50. Kaye and Malleson, *History of the Indian Mutiny* of 1857-58, Vol, II, pp. 377–80.

51. *Punjab Government Records*, Vol. VIII, *Mutiny Reports*, Part I, p. 104.

52. "In the city, "writes V. D. Savarkar, " there was a certain Moulvie (Shah Abdul Qadir) who always used to preach to the people to break away from English slavery and establish Swaraj. On account of the Moulvie's lectures, this town had become a powerful centre of the Revolutionary party in the Panjab. When the sign came that the time had come to deal the last blows at the chains of slavery, the whole town rose". (V. D. Savarkar, *The Indian War of Independence*, 1857, p. 155).

Shah Abdul Qadir was very popular with the revolutionaries in the Punjab. He also enjoyed full faith and confidence of the Revolutionary Headquarters in the Red Fort at Delhi. He had established close contacts with the native British forces in the Punjab. All instructions and orders from Delhi were sent to Ludhiana at which place were located the secret headquarters and control room of the national forces in the Masjid-do-manzli in Mohalla Mochpura. (Aziz-ur-Rehman, *Raees-ur-Ahrar Maulana Habib-ur-Rehman Ludhianvi aur Hindostan Ki Jang-i-Azadi*, pp. 63-64).

53. The "Cashmeeree shawl workers," were "imported by Sir C. Wade. They have plied their trade unmolested for years, under advantages they never could have enjoyed in their own country, being free and untaxed". (*Punjab Government Records*, Vol. VIII, *Mutiny Reports*, Part I, p. 94).

54. Kaye and Malleson, *History of the Indian Mutiny* of 1957-58, Vol. II, p. 380.

55. *Punjab Government Records*, Vol. VIII, *Mutiny Reports*, Part I, pp. 92-93.

56. *Ibid.*, p. 94.

The remaining Muhammadan population consisted of a fraternity of Gujars, Saiyeds, the old land proprietors of Ludhiana, and the lower strata of the society like butchers, petty traders, and discharged servants and camp followers, who infested all old British cantonments. They had been worked up to a high pitch of excitement and anti-British feeling by the great Maulana Shah Abdul Qadir[57] "He had twice roused the whole of the Mahomedan population to the very verge of an outbreak ; his influence extended to all classes. He was respected by many of the Afghan Shahzadahs with one of whom (Sufder Jung) he was in league, and with the inferior classes he was all-powerful. His influence also extended far through the district, as he is by origin a Goojur, a numerous race all along the lowlands bordering on the Sutlej........ On the arrival of the mutineers he collected all his disciples, hoisted the green ensign of his faith, and led them to Delhi.[58]"

Of the "Goojurs, Syuds and Mahomedan rabble ; the first-named assisted the sepoys in the fort in mounting two heavy guns in the fort bastions (the guns being heavy, a 10-inch howitzer and a 24-pounder, and being run up a steep earthen ramp by main [man] force, unassisted by any of the usual mechanical aids, must have required some 200 men at least, besides the sepoy garrison, to manage them). They possessed themselves of an immense quantity of accoutrements plundered from the fort stores and raw materials for manufactures from the gaol.[59]"

"All these persons now welcomed the mutineers, and aided them in the work of spoliation. The prisoners in the gaol were released. Whatsoever belonged to Government— whatsoever belonged to Englishmen— was destroyed, if it could not be carried off ; the quiet, trading communities were compelled to contribute to the wants of the mutineers in the money or in kind ; grain and flour were carried off from the *bunniahs'*, shops; and, wherever a horse or a mule could be found, the rebel hand was laid instantly upon it. .... The bankers secreted their money-bags, and the merchants locked up their wares and every man did what he thought best for himself in the face of the general confusion.[60]".

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57. G. H. M. Ricketts, the then Deputy Commissioner, Ludhiana, writes about Shah Abdul Qadir as under : —

"He was a compulsory resident of Loodiana, as in 1849 he was detected in treasonable correspondence with the Akhoond of Swat, whom he was secretly furnishing with arms. So to be under closer surveillance he was compelled to remain in the city..................".

(*Punjab Government Records*, Vol. VIII, *Mutiny Reports*, Part I, pp. 94-95).

58. *Ibid.*

59. *Ibid.*

60. Kaye and Malleson, *History of the Indian Mutiny of* 1857-58, Vol. II, pp. 380-81.

"The houses of Government officials were attached ; Madho Pershaud, the Extra Assistant, saved his life by concealment. The Kotwal no sooner showed his portly person than he was fired on and fled ; the Police (excepting four men) left the *kotwali* and concealed themselves[61]".

The Europeans had heard the firing of the preceding night, and had waited eagerly for the order to move, but no order came. Three hours after Rickett's one gun had been silenced by want of ammunition, Henry Olpherts, with his troop of Horse Artillery, and a party of the 8th Foot, was suffered to go through the ceremony of taking command of the 'advance' of the force that was to march to the rescue of Ludhiana. But no sooner were they ready to move than fresh misgivings arose. It was thought unsafe to send forward such a force without adequate support. In vain Ricketts sent expresses to Johnstone's camp (in Command at Jullundur), urging him to send forward the Horse Artillery to his aid ; but the day wore on, the succour never came, and the enemy rioted unchecked in Ludhiana until nightfall[62].

"At Jullundur and Ludhiana, as in very many other places, the rebels had outwitted themselves. In their eager hurry to escape from Jullundur, they took blank cartridges and left the balled cartridges behind. They arrived at Ludhiana, and in the height of their triumph at occupying the fort found, to their dismay, that it contained vast stores of guns and powder, but no shot. They had none with them, not even musket balls. To remain was useless. They evacuated Ludhiana[63]"and "made a forced march towards Delhi and when at last ...... Europeans (from Jullundur) made their appearance at Lodiana, pursuit was hopeless[64]".

The rebels were led by Maulana Shah Abdul Qadir, along with his four sons, namely , Saif-ur-Rehman, Muhammad, Muhammad Abdulla and Abdul Aziz. His elder brother, Maulana Ghulam Nabi, along with women and children of the whole family, also accompanied. They proceeded via Patiala and Karnal.[65]

"The following morning (10th June) a pursuit was ordered, but it was too late ; the mutineers had made a forced march in the night and were far beyond reach, but 13 stragglers were apprehended and executed. The pursuit

61. *Punjab Government Records*, Vol. VIII, *Mutiny Reports*, Part I, p. 105.

62. Kaye and Malleson, *History of the Indian Mutiny of* 1857-58, Vol. II, p. 381.

63. *Ludhiana District Gazetteer*, 1904, pp. 27-28.

64. Kaye and Malleson, *History of the Indian Mutiny* of 1857-58, Vol. II, p, 381.

65. Aziz-ur-Rehman, *Raees-ur-Ahrar Maulana Habib-ur-Rehman Ludhianvi aur Hindostan ki Jang-i-Azadi*, pp. 5-6.

could not have been made earlier, as the troops, though they had not undergone any wonderful fatigue in rapid marching, had been much harassed by being constantly under arm and without provisions. The troops marched 12 miles out from Lodiana and returned. and the next day proceeded on towards Delhi[66]".

"From the British point of view, the evil, which had been thus done or suffered by our [British] inertness, was small in comparison with the danger which had been escaped. It was the true policy of the enemy [mutineers] at that time, to occupy Lodiana. With the fort in their possession—guns mounted and manned, the Government treasure in their hands, and the bulk of the population on their side—they might, for a while at least, have successfully defied us [the British]. To the British cause, the loss of this important city, lying on the great high road from the Punjab to Delhi, would, indeed, have been a heavy blow. It would have affected disastrously, perhaps ruinously, the future operations of the war, by deferring indefinitely the capture of Delhi. But instead of this, the mutinous regiments merely carried themselves off, by the least frequented routes, to the Great Head-Quarters of Rebellion [Delhi], there to swell the already swollen numbers of garrison, without increasing its actual strength[67]".

"It would have been a great strategic and moral advantage", writes V. D. Savarkar, "If the Sepoys could have held Ludhiana fort, as it was the key to the Panjab; and if Ludhiana had also been a centre of the Revolution, like

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66. *Punjab Government Records*, Vol. VIII, *Mutiny Reports*, Part I, p. 106.

67. Kaye and Malleson, *History of the Indian Mutiny* of 1857-58, Vol. II, pp. 381-82.

The following observations of Mr. Ricketts, the Deputy Commissioner, Ludhiana, regarding the plan of the mutineers, are noteworthy:—

> "I imagine their plan was temporarily to hold that fort and city, whence they could command the Grand Trunk Road from the Punjab to Delhi, whence they could have spread disorganisation throughout Cis-Sutlej, and have shaken the Sikh States, and, by cutting off supplies and placing troops in requisition to attack them, have made a most untoward diversion for our small force before Delhi; but their ammunition was expended ; in their hurry in leaving Jullundur they had carried off blank for balled ammunition, and so they had to hurry on by forced marches, avoiding any possibility of collision with our troops. It may be said the above is a conjecture. I admit there is no certain information to base my remarks on ; but their combination, their collecting provisions, and the fact that (had ammunition not failed) they had the game in their hands—at least for a time—and that it was their obvious policy, bear me out in the assertion, and my impressions are based on very probable contingencies."

(*Punjab Government Records*, Vol. VIII, *Mutiny Records*, Part I, pp. 104-105.)

Delhi, it would have been a terrible shock to the English power[68]."In this connection it may be pointed out that the Revolutionary Headquarters in the Red Fort at Delhi had issued imperative orders[69] urging upon the Punjab revolutionary leader, Maulana Shah Abdul Qadir, and the other revolutionaries and rebel troops in the Punjab to reach Delhi immediately. Under the circumstances, although the Maulana might have realised the strategic importance of holding Ludhiana, yet he was left with little alternative but to comply with the orders of the superior authorities. Thus, the march to Delhi was commenced without a moment's delay.[70]

6. **Repression and reprisals**.—"It was now necessary," writes Malleson "to make a severe example of all who had been guilty of aiding and abetting the mutinous Sipahis or who had taken advantage of the confusion which they had created. It was easy to bring the guilt home to the offenders, for plundered property was found in their possession; and now that English authority had reasserted itself in all its strength, witnesses flocked in from all sides, eager to give damnatory evidence against their fellow citizens. More than twenty Kashmiris and others were promptly tried and as promptly executed. The telegraphic wires brought from higher official quarters the necessary confirmation of the sentence of death, and on the evening of their trial the prisoners were hanged. Others detected ir seditious correspondence shared the same fate.[71]"

The city was fined Rs 55,294.[72] The proposal to levy fine on the city emanated from Mr. Ricketts (Deputy Commissioner, Ludhiana) himself and was promptly approved by the Chief Commissioner. It quieted not only Ludhiana, but all the six market towns of the district. Compensation was paid to all the sufferers to the full extent of their losses, leaving a small balance to nearly cover the loss to Government property.

"After the display of such an animus by the rabble of Ludhiana and its neighbourhood, it was (considered)necessary to put it out of their power ever to display it again. To this end, all native houses within 300 yards of the fort

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68. V. D. Savarkar, *The Indian War of Independence*, 1857, p. 155.

69. For copy of two orders from the Revolutionary Headquarters, Red Fort, Delhi, addressed to Maulana Shah Abdul Qadir, Chief of the Revolutionary Headquarters, Ludhiana, and received at Ludhiana on June 1, 1857, refer to :

(Aziz-ur-Rehman, *Raees-ur-Ahrar Maulana Habib-ur-Rehman Ludhianvi aur Hindostan ki Jang-i-Azadi*, pp. 65–69.)

70. *ibid.*, pp. 64-65.

71. Kaye and Malleson, *History of the Indian Mutiny* of 1857-58, Vol. II, p. 382.

The *Ludhiana District Gazetteer*, 1904, (page 28) mentions the number of those hanged as 22.

72. *Ludhiana District Gazetteer*, 1904, p. 28.

were levelled, and the Gujar population turned out to the lowlands beyond the city. The Gujars[73] of the whole district were disarmed, but not the Jats as their subsequent co-operation with the British Government was reasonably to be expected from the good feeling they had already shown. The Gujars were also deprived of their boats, and inflated skins (for crossing the river) were made contraband amongst them. The low Hindustani population swarming in the old cantonment was dispersed and sent home.[74]"

7. **Disarming of the people of Ludhiana.**—"Taking advantage of the presence of Coke's regiment, which afterwards made good its march to Delhi, Ricketts disarmed the town of Ludhiana. ....But, doubtless,.....................there were many concealments, even in our [British] territories; and, moreover, the contiguity of the Protected Native States afforded opportunities of evading the search, to which the people of the border eagerly resorted. Mr. Barnes called upon the chiefs to adopt similar measures, and they formally complied;[75]..........There was in truth, a general feeling of mistrust; and it was presently ascertained that the people were not only concealing arms, but making large purchases of saltpetre and sulphur, and other components of gunpowder, for use in a day of danger..............so a

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73. Regarding the attitude of the Gujars and the measures adopted against them, Mr. Ricketts reported :—

"The Mahommedan Goojur population, who exclusively possess the belt of low lands along the banks of the Sutlej, and who have villages in almost every part of the district, are thoroughly bad and disaffected. The Moulvie [Shah Abdul Qadir] before alluded to as having given so much trouble was of that race and possessed great influence amongst them. From their position along the river banks they commanded all the ferries, and this induced me to deprive them of all their boats and make inflated skins contraband among them. They played me false when guides were required from amongst them to discover the mutineers' camp ; they were in constant communication from village to village with the Delhi rebels. I disarmed them all early in the season, but there is nothing to fear from them as regards open opposition, as they are a lazy, cowardly, thieving race, given to marauding and plunder when no great danger to themselves is probable. They are peculiarly vulnerable also through their large herds of cattle, which constitute their chief wealth, and which thrive and multiply on the river banks, giving little trouble to their owners."

(Reports on the events in Ludhiana District, dated 22nd February, 1858, from G.H.M. Ricketts, Deputy Commissioner, Ludhiana, to G. C. Barnes, Commissioner and Superintendent, Cis-Sutlej States, (*Punjab Government Records*, Vol. VIII, *Mutiny Reports*, Part I, pp. 107-108).

74. *Ludhiana District Gazetteer*, 1904, p. 28.

75. General report on the events in the Cis-Sutlej Division, No. 54, dated Ambala, 5th February, 1858, from G. C. Barnes, Commissioner and Superintendent Cis-Sutlej States, to R. Montgomery, Judicial Commissioner for the Punjab. (*Punjab Government Records*, Vol. VI, *Mutiny Reports*, Part I, pp. 1—24).

proclamation was made, rendering the carrying of arms a misdemeanour, and restrictions upon the sale and export of all kinds of ammunition and their components".[76]

8. **Provison of carriage for the ordnance stores from Phillaur.**—"whilst preventive and precautionary measures of this kind were being pushed forward throughout the Panjab, there were unceasing efforts all along the great road to Delhi to furnish the means of transporting stores for the service of Barnard's army. In this most essential work civil and military officers worked manfully together; and although there were many difficuties to be overcome, the great thoroughfare was seen alive with carts and carriages and beasts of burden conveying downwards all that was most needed by the army, and especially those vast supplies of ordnance ammunition which were required to make an impression on the walls of the city which we [the British] were besieging.................. ; but the loyalty of the great chiefs of the Protected Sikh States, and the energy and sagacity of Barnes and Ricketts, secured our communications, and never was the Delhi Field Force in any danger of the interception of its supplies".[77]

9. **Ludhiana 'rebel' leaders take refuge in Patiala territory.**–Soon after the fall of Delhi and the arrest of King Bahadur Shah by the Briish, Maulana Shah Abdul Qadir, along with his family and followers, escaped rom Delhi, and, via Karnal, reached Patiala forests, near village Satlana, where tey sought refuge. From there, the Muslim Rajputs of Satlana took the Mauana and his family to their village where they provided them with safe asylum.

The British declared Shah Abdul Qadir and his four sons as roels, and issued secret instructions to all parts of the Punjab for their arrest wereever they could be found. A prize of rupees one lakh was announcec for anybody who might give information leading to their apprehension and arest, but all in vain. Under instructions from the Government of India, the Deuty Commissioner, Ludhiana, confiscated and auctioned all their immovable roperty, including the Masjid-do-manzli.

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76. Kaye and Malleson, *History of the Indian Mutiny* of 1857-58, Vol. II, p. 384.

At this time, communication between Calcutta and the Punjab was very slow and irregur, and tidings of the legislative enactments passed in Calcutta had not yet reached the Froner Province. But Mr. Barnes, writing at a later period, observed, "That in the measures adopd for the trial and punishment of mutineers and heinous criminals, or for disarming the populati, or checking the importation of military stores, we only anticipated the acts almost simultanec. ly passed at Calcutta by the wisdom of the Legislative Council".(*Ibid*).

77. *Ibid*.

All through the period of their underground life in the Muslim Rajput village, Satlana, the presence of Shah Abdul Qadir, his sons and the other members of the family, was kept a close secret by its inhabitants. Secret reports about their whereabouts, however, reached the Government from time to time, and the village in question was besieged with the help of the police and army as many as four times. Each and every house was searched, but none of the wanted man could be traced.[78]

Thus, the heroes of the freedom struggle remained in this safe asylum till the Proclamation of Queen Victoria on November 1, 1858, under which a general amnesty was granted to all mutineers except those who were guilty of murder of British subjects.[79]

10. **Heroes welcomed home.**—The freedom fighters, who would not accept British domination in spite of untold miseries and privations suffered by them at the hands of alien rulers, were sought to be reconciled through a general amnesty granted under the Queen's Proclamation of November 1, 1858. Having pondered over this change in British attitude, they came out in the open to serve the country with renewed vigour and determination. In 1860, Maulana Shah Abdul Qadir and his family left Satlana for their home town, Ludhiana. At their first stage of journey, only a mile from Satlana, Maulana Shah Abdul Qadir expired.[80] On return to Ludhiana the family[81] was accorded heroes' welcome by the people. Before long, the family regained its old popularity and social eminence. The (English) Deputy Commissioner of Ludhiana, who had already felt much perturbed at the great affection and devotion shown to the Maulana brothers, could hardly countenance a situation which raised in public estimation a family which had openly stood in arms

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78. At the time of search, the refugees were hidden by the village women in secret underground cells meant for storing wheat. The way leading to the cells was known only to those women.

79. Aziz-ur-Rehman, *Raees-ur-Ahrar Maulana Habib-ur-Rehman Ludhianvi aur Hindostan ki Jang-i-Azadi*, pp. 6-7, 61-62.

80. Shah Abdul Qadir was buried in village Satlana where his grave existed till the year 1939 and even afterwards.

81. The eldest among the four sons of Maulana Shah Abdul Qadir, namely Saif-ur-Rehman, seems to have never revealed his identity, and escaped to Kabul along with his cousin, Maulana Ismail, and Maulana Fazal-uj-din Lahori. His companions returned to India after some time, but Saif-ur-Rehman settled permanently in Afghanistan at the request of Amir Dost Muhammad Khan, who being a disciple of Shah Abdul Qadir held his son in great esteem. He was granted a Jagir and some good employment. Letters continued to be received from Saif-ur-Rehman by his family at Ludhiana till the year 1913.

Saif-ur-Rehman was very tall (of 6 feet height) and of strong physique. He had received complete military training. During the march from Ludhiana to Delhi in June, 1857, the rebel force had set him up as its Commander. The accounts of his great courage and bravery are even to this day the common talk of his family people.

(Aziz-ur-Rehman, *Raees-ur-Ahrar Maulana Habib-ur-Rehman Ludhianvi aur Hindostan ki Jang-i-Azadi*, p. 63).

against the British. The three sons of Maulana Shah Abdul Qadir were thus arrested and put in jail. However, the Punjab Government and the Government of India did not approve of this step which the local authorities had taken on their own initiative. The internees were, therefore, released. The action caused immense joy and satisfaction to the people.

All their properties, which had been confiscated and auctioned by Government, were restored to them by the new owners at a nominal price. The well-known Masjid-do-manzli[82] and the surrounding buildings, which had been demolished by the British, were also got re-built according to their original plan and design. The family of Maulana Qadir, thereafter, resumed traditional spiritual, educational, social and political work among the people[83].

III. The Namdhari Movement

1. **Origin.**—The annexation of the Punjab in 1849 as a sequal to the two doggedly contested wars could not be expected to have reconciled the freedom loving people of Punjab to the British government ,which had long been looked upon as a potential enemy of the kingdom of Lahore. Though beaten in the battle-field, they still believed that the downfall and dissolution of the Lahore Darbar was due as much to the treachery of their own leaders as to the subtle intrigues of the 'Farangi', who appeared to be always anxious to subvert the neighbouring sovereign independent kingdom. The accomplishsd fact had to be accepted, but still the religious minded and discriminating among the Punjabis felt sad and sullen at the loss of their hard won freedom which had been achieved after prolonged struggle and untold sacrifices. To all those who were conscious of self-respect, their subordination to an alien Government was galling and was to be tolerated in a mood of helpless surrender. The new political set up in the Punjab, however, prompted the more awakened to probe into the causes of religious degradation and political subjugation.

The advent of the foreign rule afforded an opportunity for religious and social reform because most of the prevailing ills of the people, consequent upon the establishment of British Government, were attributed to deviation from true religion and other social mal-practices. Organised effort on these lines was expected to give the disaffected new hope and provide a rallying point for such elements as might be looking for religious inspiration and social reform. The Namdhari Movement which had originated in West Pakistan shortly before the eclipse of the kingdom of Lahore was mainly intended to bring about social and religious reform among the Sikhs. After the annexation of the Punjab political emancipation was also to form its ultimate aim, even though it was not expressly declared for reasons of expediency.

82. The Masjid-do-manzli is situated in Mochpura, Ludhiana.

83. Aziz-ur-Rehman, *Raees-ur-Ahrar-Maulana Habib-ur-Rehman Ludhianvi aur Hindostan ki Jang-i-Azadi*, pp. 9—11, 62-63.

The Namdhari movement is said to have been founded at Hazro (Attock District, West Pakistan) by Bhagat Jawahar Mal, popularly known as Sain Sahib, in the forties of the last century. The Sain Sahib and his disciple, Balak Singh, soon gathered a band of followers and started the propagation of their progressive ideas which aimed at purification of Sikh religion and removal of unhealthy social customs.

The movement assumed mass character under the leadership of Guru Ram Singh, who succeeded Baba Balak Singh. Born in 1815 at Bhaini Ala, tahsil and district Ludhiana, in the poor family of Sardar Jassa Singh, Baba Ram Singh had a religious bent of mind from early years. He had enlisted himself in the Khalsa army under Kanwar Nau Nihal Singh and had come under the influence of Baba Balak Singh while posted in the region in 1838. He left the military service in 1845 and actively took up preaching against unwholesome religious and social practices among the Sikhs.

The circumstances outlined above were sufficient to cast Guru Ram Singh for the role of a religious reformer. He had witnessed the ruination of sovereign state of the Punjab, the depravity of the leaders at Lahore, stinking immorality of the courtiers, betrayals of army generals, and imperial treacheries of the crafty aliens. He had studied these things at close quarters. In these circumstances, the influence of Balak Singh must have convinced him all the more about the need of introducing or restoring high moral standards either to restore national prestige or to save his people from further degradation. Thus early in 1857, when the country already stood on the edge of a mighty upheaval, Ram Singh began his mission[84].

Under the inspiration of Balak Singh, Ram Singh founded on April 12, 1857, the Baisakhi day, a socio-political sect called 'Namdhari', at his native village Bhaini, where to start with four Sikhs received baptism at his hands. "The tenets of the sect proclaimed Govind Singh as the only true Guru, who prohibited all worship save the reading of his 'Granth' and all employment of Brahmans, and in many ways revived the original doctrines of Sikh faith. This included the abolition of caste and of restrictions upon intermarriage, abstinence from meat, liqour and drugs, and comparatively free intercourse between the sexes. The sectaries carried staves in their hand, tied their turbans in a peculiar fashion (*Sidhi pag*), wore a necklace of woollen cord

84. M.M. Ahluwalia, *Freedom Struggle in India*, 1858--1909, pp. 245-46.

tied in knots, and had a watchword known only to themselves[85]". To the points mentioned could be added a few more such as reverence for the cow, simpler wedding ceremonies and abolition of infanticide which were expounded with equal emphasis. The "Namdharis, while reciting Sikh *Mantras* or repeating the Name, often developed emotions, screamed and shouted, turbans in their hands and hair streaming in the air, hence called *Kukas* or the shouters[86]."

Baba Ram Singh was never reconciled to the rule of the British. His prediction about its early end was indicated by his prohibition to join Government service, to go to courts of law or learn the English language. The movement thus acquired a distinct political bias. Its chief inspiration was, in fact, derived from opposition to the foreign rule and everything tending to remind one of it was shunned. English education, mill-made cloth and other imported goods were boycotted. In its advocacy of the use of the Swadeshi and non-co-operation, the Kuka movement forestalled, in the sixties of the last century, an important feature of the nationalist struggle under the leadership of Mahatma Gandhi[87]. Thus the Namdhari Movement may be described as a precursor of the Indian National Congress which adopted the principles as important planks of political programme.

2. **Spread of the movement.**—Guru Ram Singh fixed 22 preaching centres in different parts of the Punjab, and in each one of these he appointed a Deputy called *Suba*. Besides, *Subas* were also appointed in Gwalior, Hyderabad Deccan, Varanasi, Lucknow, Nepal and Kabul. The institution of *Subas* was completed by 1864, and they went about preaching Guru Ram Singh's message from place to place.

In the beginning, the districts of Sialkot, Amritsar, Hoshiarpur and Ludhiana formed chief centres of Namdhari activities, but later the movement spread to Ferozepore, Lahore and Gujaranwala as well. Not only Sikhs joined this movement in great numbers, Hindu were also attracted towards it and by 1871, as revealed by Giani Rattan Singh in the court of Mr. Cowan, the Kukas numbered ten lakhs, of whom only one third were *Kesadharis*, the rest being all *Sehjdharis*. The Kukas were to be found in all professions. They were business-men, traders and merchants, and employed in Government and private service. They were especially keen to enlist in Police and Army, where it was difficult to ascertain their numbers, because they joined these services with a purpose and never revealed their Namdhari Kuka affiliations.[88]

With the rapid growth of Namdhari movement Guru Ram Singh acquired great influence and importance. When he went on tours, his entourage consisted of a number of his *Subas* and splendid horsemen, all in immaculate white

85. D.C.J. Ibbeston, *Report on the Census of the Panjab*, 1881, (quoted in *Ludhiana District Gazetteer*, 1904, pp. 84-85).

86. G.S. Chhabra, *The Advanced History of the Punjab*, Vol. II, pp. 368-69.

87. Harbans Singh, *The Heritage of the Sikhs*, p. 131.

88. G.S. Chhabra, *The Advanced History of the Punjab*, Vol. II, pp. 369-70.

dress.[89] He became the leader of the sect after the death of Baba Balak Singh in 1863, and his followers began to call him a *Guru*. He "declared himself to be an incarnation of Guru Gobind Singh, and preached the revival of the Khalsa and the overthrow of the English Government."[90] He is said to have asked his followers not to accept services under the Government, not to send children to Government schools, not to use courts of law but settle disputes in Panchayats, not to use foreign goods, and not to use Government postal service. Ram Singh is said to have openly declared that when one hundred and twenty-five thousand Sikhs would have joined him, the English would be defeated and fly from the country and the Namdharis would rule over the whole country from Ghazni to Calcutta.

3. **Activities of the Namdharis up to 1871.**—The Namdhari movement, particularly its socio-political character, had been causing anxiety to the Government since 1863, and they looked upon it as a source of great potential danger. It was reported that Baba Ram Singh had been carrying on secret negotiations with Maharaja of Nepal, and that a "Kuka' regiment had been organised in Jammu in 1870 with the connivance of the Maharaja of Jammu and Kashmir. The 'Kukas' were also believed to have propagated their doctrines among the native princes. But the truth of all these cannot be established with certainty. In any case, the Government kept a sharp eye on the movement and special precautions were taken from time to time to prevent large gatherings of the Namdharis.

Prior to 1871, the main plank of activities of the 'Kukas' was strong feeling against cow slaughter, especially the butchers who seemed to have been emboldened in their outrageous practices under the British rule. After the annexation of the Punjab they had promised to continue Lahore Darbar's prohibition against cow-slaughter. This was not, however, respected in practice soon after the advent of British rule in the Punjab and beef was openly sold in markets. To check this activity calculated to injure their religious feelings the Namdharis prepared a plan to murder the butchers. Such action brought them into an open clash with the authorities.

The establishment of a public slaughter-house near one of the gates of the golden temple at Amritsar and throwing of bones into a Hindu well provoked the 'Kukas', who murdered four butchers and wounded three others. In the course of a raid at Raikot in Ludhiana district, the Kukas killed three and wounded thirteen others. It is generally believed they were earning spiritual merit thereby. So although nine 'Kukas' were executed and two transported for life for these crimes, no legal action was taken against Baba Ram Singh.[91]

89. *Ibid.*

90. D.C.J. Ibbeston, *Report on the Census of the Punjab*, 1881, p. 138. (quoted in *Ludhiana District Gazetteer*, 1904, p. 85).

91. R.C. Majumdar, *The History and Culture of the Indian People*, Vol. IX, *British Paramountcy and Indian Renaissance*, Pt. I, p. 903.

4. **Attack on Malerkotla and suprression of the movement.**—The severe punishments urged the 'Kukas' to greater activity as corroborated by the official report: "On the 13th January, 1872, there was a meeting of Kukas at Bhaini and a gang of about 150 of these, after working themselves up into a state of religious frenzy, started off under the leadership of two Jats of Sakraundi in Patiala territory. Ram Singh (who disapproved of this action) informed the police of their intention to do some mischief, saying that he had no control over them, but it was considered sufficient to see them out of our [British] territory. They were armed with axes, sticks, etc., only, and are said to have declared that the town of Maler Kotla would be the object of their attack. They went to Pael in Patiala territory without causing any disturbances, and re-appeared next day near to Malaudh, the seat of Sirdar Badan Singh, on which they made a sudden onset with the idea, probably, of getting arms and money. They are said to have wanted the Sirdar to lead them. In this attack two men were killed on each side and a few wounded, and the gang succeeded in securing three horses, one gun and one sword. No one joined them anywhere on their march, and they never numbered more than 150 men at the outside. They next proceeded to Kotla (the capital of the small Mohammedan Malerkotla State), which is nine miles distant from Malaudh, and on the morning of the 15th made a sudden attack on the palace and the treasury of the Nawab; but were driven off when the Kotla guards had recovered from their surprise, and pursued to Rurr in the Patiala territory, where to the number of 68 they surrendered to the Patiala authorities. At Malaudh and Kotla they had killed 10 men and wounded 17, while their own loss had been 9 killed and 38 wounded. On getting news of the attacks on Malaudh and Kotla, Mr. Cowan the Deputy Commissioner of Ludhiana, started for the latter place, and telegraphed for troops, which arrived soon after." Cowan ordered the 68 prisoners, of whom 29 were wounded, to be sent to Malerkotla where, by his orders on January 17, 1872, at 7 o' clock, 49 of them were blown away from 7 guns[92]. One was cut to pieces when he rushed forward to attack the Deputy Commissioner. There was not even the semblance of a trial. A summary trial was, however, held by Mr. Forsyth, Commissioner, Ambala Division, in respect of the remaining prisoners who were also executed[93] on the following day.

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92. *Parliamentary Papers* 356 (*East India Kooka Outbreak*), 1872, 11.

93. Shakuntla, Miss., *A Brief Account of Namdharis*, pp. 14-15. A fair is also held at the place to pay homage to Namdhari martyrs.

Messrs Cowan and Forsyth took an unduly serious view of the Kuka activities, in which connection reference may be made to letter No. 857, dated April 30, 1872, from the Secretary to Government of India, Home Department, to Officiating Secretary to Government, Punjab, (quoted by G.S. Chhabra, *The Advanced History of the Punjab*, Vol. II, p. 377.

Baba Ram Singh had always been kept under surveillance by the British Government. Although no legal action was taken against him for the murder of butchers, he and some of his principal followers were interned within their villages, and a body of police was posted at Bhaini. The restrictions were partially removed in 1866, but Baba Ram Singh was held responsible for the outrage of 1872, though he had disowned the band of his followers who attacked Malaudh and Kotla, and kept the police informed of their activities.

After this occurrence, the Government acted promptly and ruthlessly to stamp out the movement. The Lt. Governor ordered the arrest of Guru Ram Singh and his influential lieutenants. The headquarters at Bhaini were raided and the Kukas there numbering about 200 were taken to Ludhiana and sent to their respective districts. Namdharis were treated as members of a seditious organisation and the assembly of more than five Namdharis was forbidden. Their movements were watched, reported and regularised from village to village.[94]

The Namdhari movement was thereby successfully suppressed. There is hardly any doubt that the rash action of a small group of the over zealous among the Kukas, undertaken without the approval of their leader, was largely responsible for the unexpected and speedy end of the movement.[95]

5. Activities of the successors of Guru Ram Singh.—Guru Ram Singh was deported to Rangoon in Burma where he was kept as a State prisoner. His brother, Hari Singh, was also not allowed to move out of village Bhaini. Nevertheless, desperate efforts were made from time to time by the 'Kukas' to contact their imprisoned Guru. Many secret despatches of Ram Singh were occassionally captured from the persons of 'Kukas' who risked long journeys merely to have a look at their spiritual leader.[96]

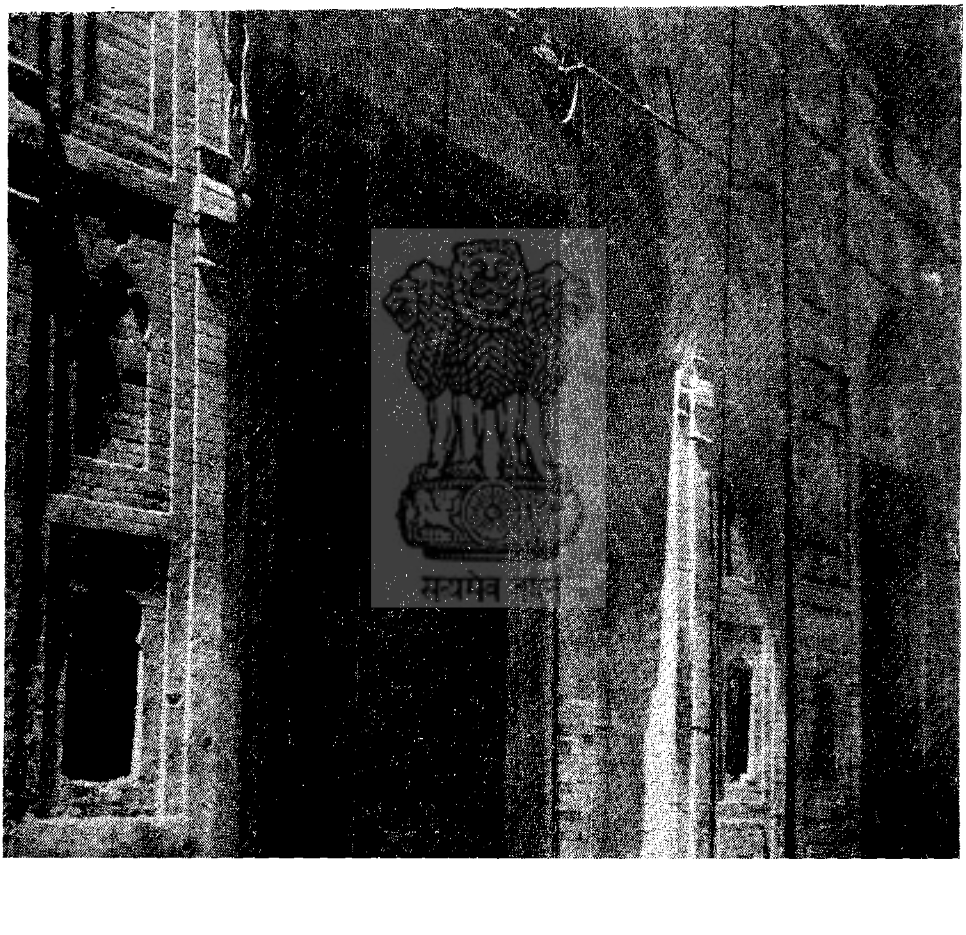
From Bhaini, Hari Singh also strove to send his secret emissaries to the Russians on the one side and Guru Ram Singh at Rangoon on the other. Some of these secret communications were intercepted by the British authorities. They arrested Gurcharan Singh[97] (inhabitant of Chak Ram Dass in Sialkot District) in 1880, because he, along with Shankar Rai, Maya and Budh

94. Shakuntla, Miss, *A Brief Account of Namdharis*, pp. 14-15.

95. R.C. Majumdar, *The History and Culture of the Indian People*, Vol. IX, *British Paramountcy and Indian Renaissance*, Pt. I, p. 904.

96. M.M. Ahluwalia, *Freedom Struggle in India*, 1858-1909. pp. 250-52.

97. G.S. Chhabra, *The Advanced History of the Punjab*, Vol. II, p. 375.



Singh was the carrier of letters between Russians and Hari Singh.[98] The authorities also removed Guru Ram Singh from Rangoon to an island prison at Mergui, where he was kept under heavy guard. The Kuka contacts were, therefore, snapped, although not totally.[99]

The last days of Guru Ram Singh's imprisonment were tragic. His prolonged detention and solitary confinement, at last exhausted the patience with which at first he bore it. Weakened by old age and after suffering repeatedly from dropsy, general debility and dysentry, the State prisoner Guru Ram Singh was said to have died on November 29, 1885, at 4-30 p. m.[100].

Guru Ram Singh disappeared from the political scene in 1885, but his work and inspiration continued among his numerous followers. He was succeeded by Guru Hari Singh, who was not allowed to move out of his house in village Bhaini for 21 years till his death in 1906. Guru Hari Singh was succeeded by Guru Partap Singh. Throughout the period uptil the attainment of Independence in 1947, the 'Kukas' remained active fighters against the alien rule. Their hostility and non-co-operation with the 'Farangi' never subsided, although the baits offered to them were substantial and the oppressions practised on them extremely trying. During the World War I (1914—18), the British Government tried to appease them by land grants and through some other means, but failed to entice them and had to use the tyrant's rod.

When Gandhi started the non-co-operation movement, the Namdharis responded to his call and zealously supported the national struggle. Gandhi ji himself is said to have borrowed certain features from the Namdharis to reorientate the Congress campaign for the liberation of the country.

Today, the Namdharis form a distinctly cohessive group among the Sikhs. Two things immediately mark them off from the latter—the style of their headgear and their adherence to the personality of their leader. Apparrelled in immaculate white home-spun, they wind round their heads mull or long cloth without any semblance of embellishment and without giving it any sharp, emphatic lines[101].

IV. New Phase of Freedom Movement

The Great Revolt of 1857 was ruthlessly suppressed and the unsuccessful participants were subjected to merciless repression and reprisals in the form of indiscriminate executions, imprisonments, confiscation of property and

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98. Shakuntla, Miss, *A Brief Account of Namdharis*, p. 15.

99. *Department of Home (Judicial-B), Progs.* 142-46 of April, 1881, *Letter No.* 1.

100. *Department of Home (Judicial-B), Progs. 236—40 of June 1882* (M. M. Ahluwalia *Freedom Struggle in India*, 1858-1909, pp. 253, 385-87).

101. Harbans Singh, *The Heritage of the Sikhs*, p. 137.

withholding of pensions, etc. The atrocities committed by the British in the name of restoration of order left behind a trail of smouldering bitterness.

"The members of the revolution, however, were not altogether extinguished ; they lay smouldering and some one would arise here and there, to kindle them into a flame[102]". This was amply borne out by the persistent opposition to British rule carried on by the Namdharis under Guru Ram Singh and his successors, who with their puritanical way of living, and their determined faith in the nationalistic ideals had become the precursors of freedom struggle in the country.

The active participation of the famous Maulvi family of Ludhiana in the Great Uprising of 1857 and the presence of some other prominent nationalist-minded Muslim families at Ludhiana as also the existence of the headquarters of the Namdhari Movement at Bhaini Sahib (near Ludhiana) produced far reaching effects upon the political and social life of Ludhiana district. Under the influence of these patriotic forces, the atmosphere in the district remained free from narrow communal feelings. Later on, Ludhiana became the chief centre of the Ahrar Movement among the Muslims. The Ahrars agitated against the British imperialism in collaboration with the Congress. An active body of freedom fighters, the Ahrars propagated nationalistic ideas among the Muslims in the teeth of opposition from their co-religionists. It is, therefore, no wonder that the nationalist forces have all through remained ascendant, and right uptil the achievement of Independence, the district enjoyed almost complete communal harmony.

Lala Lajpat Rai.—Although Lala Lajpat Rai was born at Dhudike, a small village in tahsil Moga, district Ferozepore, on January 28, 1865, the family had close associations with Ludhiana district because it originally hailed from Jagraon. Lala Lajpat Rai was educated at his ancestral town where his father, Shri Radha Kishan, happened to be a teacher. For these reasons, Jagraon.[103] in Ludhiana district is considered to be the home town of Lala Lajpat Rai and the district, is, therefore, proud of the great son of the Punjab, who had played a pioneering role in the political awakening in the Punjab.

Bold Challenge to Sir Syed Ahmed Khan.—At the very birth of Indian National Congress in 1885, Sir Syed Ahmed Khan raised his voice against it for its demand of a representative form of Government which meant rule of the majority. He urged the Muslims to boycott the Congress which he declared to be a body of Hindus whose interests, he said, were diametrically

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102. Gulab Singh, *Under the Shadow of Gallows*, pp. 1-2.

103. To perpetuate the memory of the eminent political leader of the Punjab, the Lajpat Rai Memorial College was started at Jagraon in 1959, by Radha Kishan Trust, which was founded by Lala Lajpat Rai himself at his home town.

opposed to those of Muslims. To actively promote such views, he started the Aligarh movement.

This grave challenge to the nationalist forces was boldly met by Maulana Abdul Aziz of Ludhiana who openly supported the Congress. This brought forth fierce reaction from Syed Ahmed Khan who gave *fatwa* against Abdul Aziz. The Maulana brothers of Ludhiana, Shah Muhammad and Abdul Aziz, were not slow in mounting a counter offensive against it. They issued, in 1888, a *fatwa* refuting all the views and injunctions of Syed Ahmed Khan and strongly urged the Muslims to join the Congress. It was got signed by some 237 Ulemas (Muslim theologians) of Ludhiana, Jullundur, Kapurthala, Amritsar, Batala, Ferozepore, Kasur, Lahore, Multan, Gujrat, Pakpatan, Ambala, etc., in the Punjab, and several other places in India and even abroad. This *fatwa* was published in a book form in the first week of December, 1888, and its copies were distributed at the fourth session of the Indian National Congress held at Allahabad in the third week of December, 1888, through Khwaja Ahad Shah,[104] a delegate from Ludhiana. It gave a blow to the progress of Sir Syed Ahmed Khan's movement in the Punjab and U.P. The Ludhiana Maulvis, thus, rendered a great service to the then newly born national organisation and laid the foundation of the nationalist school of thought among the Muslims of India.[105]

Calcutta Session of the Indian National Congress, 1906.—Dr. Chander Bhan Satija of Ludhiana attended the annual session of the Indian National Congress held at Calcutta in 1906, under the presidentship of Dadabhai Naoroji. He had been associated with the Congress since December, 1893, when he was a student of the Medical College, Lahore, and had served as a volunteer during the Congress Session held there under the presidentship of Dadabhai Naoroji. He also attended the Calcutta Session of 1911.

Morley-Minto Reforms, 1909.—Under the Morley-Minto Reforms, Khawaja Ahad Shah of Ludhiana was elected to the Central Legislative Council in 1910 as a liberal Congressite and remained its member for nine years till 1919. After the Jallianwala Bagh tragedy of April, 1919, his residence became an asylum for revolutionaries. The Maratha leader Mangla and Dr. Saif-ud-din Kitchlew took shelter there during the period of underground political activities. [106]

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104. Khawaja Ahad Shah was a disciple of Maulana Shah Muhammad of Ludhiana. In 1888, he became a member of the Indian National Congress.

105. Aziz-ur-Rehman, ***Raees-ur-Ahrar Maulana Habib-ur-Rehman Ludhianvi aur Hindostan ki Jang-i-Azadi***, pp. 17, 26-37, 40-41, 54, 60, 72.

106. *Ibid.* pp. 72-73.

Khawaja Ahad Shah was a very popular figure. He remained a member of the Ludhiana Municipal Committee for 26 years and died in 1923 at the age of 63.

V. The Ghadar Movement, 1913—15

The large number of Indian emigrants in other countries, especially in the U.S.A., were subjected to all sorts of humiliating disabilities and difficulties. The treatment meted out to them at the hands of the Government and the people was both discriminatory and degrading. In addition to the hardships which the emigrants were made to suffer, most of the Governments had proceeded to adopt legislative measures to squeeze them out of those countries. The more intelligent among the Indians abroad felt that they were unnecessarily accorded an inferior status as compared to the ordinary citizens of those countries. Efforts made to get their grievances redressed proved unsuccessful in the face of public indifference and official apathy. The Indians realized that the main cause of their troubles was the political subjugation of the mother country and, unless India attained freedom, they could not expect honourable treatment from the inhabitants of the countries where they had settled.

The ground was thus prepared for setting up a political organisation to give guidance and direction to the movement. The outcome of the ferment was the formation of the Ghadar Party in 1913, with headquarters at San Francisco. Its aim was to liberate India by force. Munshi Karim Bakhsh of Ludhiana was one of its Organising Secretaries, and Kartar Singh [107] of village Saraba (tahsil Ludhiana) was a member of the Executive Committee.

The outbreak of World War I, 1914—18, was hailed by the Indian revolutionaries living abroad as a favourable opportunity to free the country from British rule through armed uprising with foreign assistance. The Ghadar Party tried to achieve the objective by sending Indians, mostly Punjabis, imbued with revolutionary ideas, back to their mother country to stir up rebellion there. The Government of India were fully informed of the activities of the Ghadar Party and took necessary precautions. The Ingress Ordinance of September 5, 1914, was purposely passed to deal with the Indian emigrants coming back to India. [108]

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107. Kartar Singh Saraba was the son of Sardar Mangal Singh, Zaildar of village Saraba, Ludhiana tahsil. He was born in 1896.

He was one of the important members, who (besides the Editor Hardayal) worked in the press for the 'Ghadar', a weekly journal of the Ghadar Party, started on November 1, 1913.

(G. S. Chhabra, *The Advanced History of the Punjab*, Vol. II, pp. 406-407)

108. R.C. Majumdar, *History of the Freedom Movement in India*, Vol. II, p. 447.

It is further stated that :—

"A serious problem arose for the authorities in the Punjab, when on September 27, 1914, S.S. Komagata Maru brought 400 Sikhs and 60 Muslims from the Far East in Hoogly."

Scores of the Ghadarites, however, sneaked through enquiries under the Ingress Ordinance and contacted the local revolutionary leaders. "There was not a village in the Punjab where '*Ghadar*' did not reach to excite the passions of literate people and students and through them the illiterate masses. The teachers, *kisans* and all sorts of labourers in the villages..........caught the spirit of Ghadar" [109]

Most important of all was the work in the army. "The Sikhs and Punjabi Mohammadens dominated the Indian army, and these very communities were the backbone of the Ghadar movement. They had, therefore, an immense capacity to spread disaffection in the Indian army and some of them infiltrated the army as recruits. The Ghadar revolutionaries were bold, fearless and defiant, and were altogether unlike the members of secret party organisation who usually worked underground. Their plans were seldom kept secret from their followers and were in many cases carried to the Governmental authorities by their spies working among them. Railway Stations, Police Posts, means of communications, such as telephone and telegraph wires were to be destroyed and military camps and check-posts were to be disorganised. Government Treasuries were to be looted and Revolutionary Camps were to be established in jungles and border areas. The British military and the administration were to be harassed and arms and ammunition were to be captured by carrying on raids on arsenals and military camps".[110]

Response from students, particularly at Ludhiana, was encouraging. Dewa Singh, a sports goods dealer at Ludhiana, inspired revolutionary ideas among the students, prominent among whom was Sucha Singh. They engaged themselves in collecting material for preparing bombs, publishing revolutionary literature, acting as messengers, carrying on propaganda among Indian military personnel, etc. The room of Sucha Singh in the Islamia School Boarding House, Ludhiana, became a rendezvous of revolutionaries.[111]

There was a general discontent among the soldiers because of the excessive loss of life among the Indian soldiers as compared with the British at the European front. The Ghadarites were out to exploit their grievances, and, with their heads literally on the palms, they successfully infilterated into the military cantonments and went about preaching murder and mutiny everywhere.[112] "19-years-old Kartar Singh, Saraba,..............stood out as the model

109. Gulab Singh, *Under the Shadow of Gallows*, p. 13.

110. *Ibid.*

111. Pritam Singh Panchhi, *Ghadar Party Ka Itihas*, p. 129.

R.C. Majumdar, *History of Freedom Movement in India*, Vol. II, p. 453.

112. Gulab Singh, *Under the Shadow of Gallows*, p. 15.

revolutionary organiser. Always on his bike, he would travel hundreds of miles at a stretch leaving in his wake the burning trail of revolt. There was not a single cantonment from Bannu down to Benares that he had not visited and created revolutionary centres therein. Brilliant and resourceful, with unfailing presence of mind he would go dressed as an officer and take the salute from unsuspecting guards. 'If you must die, why not die under the revolutionary flag, in your own country's cause ? — he would tell the discontented Indian soldiers, daily dreading to be sent abroad".[113]

To equip themselves with necessary funds, the Ghadarites had to resort to looting or dacoities, a number of which were committed in Ludhiana district. On January 23, 1915, ornaments were taken from the family of a Hindu shopkeeper at Sahnewal (tahsil Ludhiana). On the 27th January, 10 or 15 dacoits attacked the house of a Hindu in village Mansuran (tahsil Ludhiana). They took away a large amount of booty proclaiming to the assembled villagers that they were collecting money to turn out the British and would be assisted by the Germans. Villagers who opposed the robbers were fired at and bombed. Some students from Ludhiana were implicated in this outrage. Still another dacoity was committed on February 3, 1915, at Rabon Unchi (tahsil Ludhiana), where a woman was robbed of property worth Rs 4,198 which was devoted to revolutionary purposes.[114]

In the beginning of February, 1915, Sant Randhir Singh (of Narangwal) held a conference of about a hundred revolutionaries at Gujarwal (tahsil Ludhiana). On the 14th of the month, there was Akhand Path, after which the Sant held a secret meeting on the roof of the house where he announced that the time for a general uprising had approached and the army units were ready for rebellion. Funds were collected and it was given out that the date of the uprising would be intimated afterwards.[115]

The plans of the Ghadarites were going according to schedule. The 21st February, 1915, was fixed for a general rising in the province ; but unfortunately, as so often happened in the case of the plans of the revolutionaries, the information leaked out. As a safeguard the date for the revolt was advanced to the 19th February, 1915. Still the Government forestalled the move and struck in time. The proposed uprising failed to come off. Instead, a hunt for the revolutionaries was launched. For the next two weeks terror prevailed in the Punjab. Everyone was suspect and very few escaped the wide net cast by the police.

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113. Randhir Singh, *The Ghadar Heroes*, p. 16.

114. R.C. Majumdar, *History of the Freedom Movement in India*, Vol. II, pp. 403, 448-51.

115. Pritam Singh Panchhi, *Ghadar Party ka Itihas*, p. 131.

The arrested men were to be tried ; but it was not done until the Government had made things secure for itself. The Defence of India Act [116] was hurriedly rushed through the Imperial Legislative Council. Its most important provision was the appointment of 'Special Tribunal' for the trial of the revolutionaries. Under the new Act, neither commitment proceedings to these Tribunals nor judicial appeals from their decisions were allowed. A Tribunal of 3 was set up in the Punjab ; its only Indian member was Shri Shiv Narain Sharma. On 27th March, 1915, the First Lahore Conspiracy Trial opened at Lahore. Barrack No. 16 in the Central Jail at the station was specially improvised to serve as the court of trial.[117]

Sardar Kartar Singh Saraba[118], the 19-year old leader of the Ghadar Group, figured as the most prominent revolutionary in the trial. Throughout the trial Kartar Singh displayed dauntless spirit of defiance to British Government, which in his words " meant poverty and degradation at home and humiliation abroad." He was bold enough to assert : "I have committed no crime. It is the right of the slave to revolt."

On September 13, 1915, the under-trials were marched out of Barrack No. 16 for the last time after the Special Tribunal had delivered its judgment.

Kartar Singh Saraba and Nand Singh, both of Ludhiana district, were among the twenty-four sentenced to death with confiscation of property. Of these, the sentences of 17, including Nand Singh [119] and Rulia Singh were later on commuted to transportation for life. [120]

Gurmukh Singh of Ludhiana district was among another 26 who were sentenced to transportation for life with confiscation of property.

There could be no judicial appeal and very few agreed to appeal for mercy.

Early in the morning of November 19, 1915, Kartar Singh, alongwith his 6 comrades, was taken out. They mounted the gallows singing and smiling.

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116. On 19th March, 1915, the Defence of India Act (Act IV of 1915) was passed ; it was brought into force in sixteen districts of the Punjab three days later.

(M.S. Leigh, *The Punjab and the War*, p. 21).

117. Randhir Singh, *The Ghadar Heroes*, p. 19.

118. A small statue of the great patriot adorns the traffic island near the Clock Tower, Ludhiana.

119. Nand Singh died in Andaman, under barbarous treatment meted out to the Ghadar prisoners sent there. (*Ibid.*, p. 27)

120. Khushwant Singh and Satindar Singh, *Ghadar* 1915 (New Delhi, 1966), p. 72.

On the eve of his execution, Kartar Singh was again asked to appeal for mercy. "If I had to live more lives than one," he boldly retorted, "I would sacrifice each of them for my country's sake." [121]

Thus ended the efforts of the simple and in most cases uneducated people entirely in the foreign surroundings, to contribute their little bit in the fight for the freedom of their motherland. At a time when the leaders of the Indian national movement were talking of "self-government on British Dominion model," the heroes of the Ghadar Party had dared to raise the banner of complete independence, of armed revolt against imperialism[122]. It was the most powerful revolt planned since the Mutiny of 1857[123]. The Ghadar movement, which may be characterised as a 'revolution' in the Punjab, was in a way the first secular effort to liberate India by the use of arms. The Ghadar Party, though composed of overwhelming numbers of Sikhs, had no pretentions of religious revival and sought to achieve a strictly political goal. For this reason both Hindus and Muslims were drawn towards it and later several other revolutionary groups were greatly influenced by the new ideology which had shed all religious bias. Thus Ludhiana district, as evidenced by the activities of some of the most prominent Ghadar Party members who hailed from there, occupied an honourable place in this phase of freedom struggle.

VI. Between the two World Wars

Disturbances of April, 1919.—During World War I (1914—18), the Indians helped the British Government freely with men and money. The people responded most enthusiastically to make the war effort a success. After having done their best, they felt frustrated with what was offered to them by the Rowlatt Committee Report of 1918. It is, therefore, no wonder that deep public dissatisfaction expressed itself in the form of strikes and other disturbances. To combat seditious crimes, the Government, in spite of opposition from all quarters, passed in 1918 the Rowlatt Act, arming the Executive with special powers to deport individuals, to control the peace and set up special tribunals for the trial of political offenders without juries.

Agitation against the Rowlatt Act.—The prominent leaders in this agitation in the district were two advocates of Ludhiana, namely, Lala Bhagat Ram and Mian Abdul Haye. On March 31, 1919, a meeting of women, to protest against the Rowlatt Act, was held in the Arya Samaj Mandir at Ludhiana.

121. Randhir Singh, *The Ghadar Heroes*, p. 24.

For a list of revolutionaries belonging to Ludhiana District tried and convicted by Special Tribunals, *See* Appendix at pages 121-24.

122. *Ibid.*, p. 25.

123. *Ibid.*, p. 18.

A second meeting for the purpose of protesting against the Rowlatt Act and urging upon the people the necessity of observing a *hartal* was held at the Qaisarganj grain market at Ludhiana on 3rd April, 1919. A third meeting was held at the same place two days later on 5th April, 1919 and a general *hartal* was observed at Ludhiana and Sahnewal on 6th April. At Ludhiana a public meeting was also held at the Budha Nala Ghat the same evening.

On April, 10, 1919, a public meeting was held at the Qaisarganj Market, Ludhiana, for promoting Hindu-Muslim unity, for considering the construction of National Hall in Lndhiana, and for inviting the holding of the next Punjab Provincial Political Conference at Ludhiana in 1920.

On his way from Bombay to the Punjab, Gandhiji was arrested at Palwal on 9th April, and sent back from there by a special train to Bombay. To protest against the arrest of Gandhiji, a public meeting was held at the Qaisarganj Market on 12th April, 1919. A *hartal* was also observed at Ludhiana on 16th April, 1919. At a public meeting held at the Budha Nala Ghat the same day resolutions were passed protesting against the externment of Gandhiji from the Punjab.

On April 17, 1919, Ludhiana District was proclaimed as disturbed under section 15 of the Police Act of 1861.[124]

Khilafat Movement, 1920—22.—Though started soon after the Amritsar sessions of the Indian National Congress, Jamiat-ul-Ulma-i-Hind and the Muslim League, held towards the end of December, 1919, the Khilafat Movement was effectively started in the Punjab on January 1, 1920, when for the first time the Punjab Khilafat Committee was formed on a provincial basis.

On the same day, Khilafat Committee was also formed at Ludhiana with Maulana Habib-ur-Rehman[125] as its President. The membership of the Committee extended to all communities Hindus, Muslims and Sikhs. The headquarters of the Khilafat Committee were located at the Masjid-do-manzli in Mochpura, Ludhiana.

There were three other important centres of the Khilafat Movement in Ludhiana district at Balliawal (tahsil Ludhiana), Jagraon and Raikot.

In 1921, 'Bee Amman', the mother of Ali brothers, visited Ludhiana, where she was taken out in a grand procession.[126].

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124. *Memorandum on the Disturbances in the Punjab*, April, 1919, pp. 71-115.

125. Maulana Habib-ur-Rehman (a great-grandson of Maulana Shah Abdul Qadir, the great Punjab hero of the First War of Independence of 1857) was born on July 3, 1892, at Ludhiana, and died on September 2, 1956, at Delhi. He served the country for full 42 years from 1914 onwards, and ranked among the prominent freedom fighters in the Punjab.

(Aziz-ur-Rehman, *Raees-ur-Ahrar Maulana Habib-ur-Rehman Ludhianvi aur Hindostan ki-Jang-i-Azadi*, pp. 8, 54, 94)

126. *Ibid.*, p. 72.

Non-Co-operation Movement, 1920-22.—During his tour of the Punjab to create enthusiasm among the people for this movement, Gandhiji visited Ludhiana in February, 1921, alongwith Lala Duni Chand of Ambala. Gandhiji spoke in a big public meeting held in the Daresi Grounds, after which he left for Ambala.

On December, 8, 1921, Master Taj-ud-Din led a batch of non-co-operators, comprising Hindus, Muslims and Sikhs, through the bazaars of Ludhiana. The agitators were arrested.

Next day (December 9, 1921), Muhammad Yahi, along with a batch of about 200 Satyagrahis, marched in a procession and was arrested.

On the third day (December 10, 1921), about a hundred blind students of a Muslim school for the blind at Ludhiana, led by their teacher, Muhammad Yasin, also participated in the movement. This created great excitement in the town. It also alarmed the authorities who arrested only their leader and let the blind students, after having taken them to the Police Station, go away.

In this way batches of people continued offering Satyagrah and getting arrested till 20th December, 1921. During the twelve days, some three thousand persons were arrested and sent to jail.

On the 20th December, 1921, a procession of *burqa* women marched through the town for offering Satyagrah, but the police dare not arrest them[127].

On 21st December, 1921, Maulana Habib-ur-Rehman addressed a large gathering in connection with the civil disobedience movement programme. Under his leadership, a large number of persons, young and old alike and even children, got ready for offering Satyagrah. The police tried their best to arrest Maulana Habib-ur-Rehman but could succeed in their object after two days, on 22nd December, 1921. As he was paraded through the town hand-cuffed, great excitement prevailed. People in thousands offered to become volunteers for civil disobedience. They had shed all fear and awe of the police and it became a problem for the authorities to keep the people under control. Habib-ur-Rehman [128] was sentenced to six months' imprisonment and a fine of rupees one thousand.

By this time, some three thousand volunteers had courted arrest and were put in jail. Nearly one hundred and fifty volunteers were arrested and put in jail almost everyday. The Ludhiana jail got overcrowded. However,

127. Aziz-ur-Rehman, *Raees-ur-Ahrar Maulana Habib-ur-Rehman Ludhianvi aur Hindostan ki Jang-i-Azadi,* p. 105.

128. Maulana Habib-ur-Rehman remained in jails at Ambala, Mianwali and Dharamsala for about one year and eight months from December 21, 1921 till his release on August 16, 1923. (*Ibid.*, pp. 107-15).

the then Superintendent of the Jail, Col. Hakumat Rai, treated all the political prisoners very well, for which all of them were full of praise for him.[129]

The District Congress Committee, Ludhiana, was formed about the year 1919. Dr. Chander Bhan Satija was its founder President from 1919 to 1926. During the period, the prominent Muslim Congress members were Mian Abdul Haye, Advocate, Maulana Habib-ur-Rehman, Mian Ghulam Rasul and Mian Abdulla, Advocate.

Akali, Movement, 1920-25.—As a part of the general awakening in the Punjab produced by peaceful conditions under the British rule of over half a century, the Shromani Akali Dal was organised in 1920 to effect reforms in the management of Gurdwaras. The control of Sikh shrines by certain individuals had led to all sorts of malpractices which were considered highly objectionable by the Sikh masses. Since all efforts to improve the management of the Gurdwaras were athwarted by powerful vested interests with the Government support, a regular agitation was launched to achieve the objective. The struggle for Sikh shrines, on the pattern of non-co-operation movement practised by the Indian National Congress, assumed the form of a popular movement and after considerable suffering resulted in the passage of the Gurdwara Reforms Act, 1925, which placed all Gurdwaras under the control of the Shromani Gurdwara Parbandhak Committee.

The Akali movement produced powerful impact on the district. Among the prominent persons thrown up by this movement from Ludhiana district, the name of Sardar Mangal Singh[130] deserves special mention. Having joined the movement, he became Editor of the paper 'Akali', published from Amritsar.

Babbar Akali Movement, 1922-26.—The repressive measures adopted by the Government to crush the Akali Movement compelled more radical among the Sikhs to resort to desperate action. The Babbar Akali Movement was started in August, 1922, under the stress of prevailing political conditions.

One of the valiant heroes of Babbar Akali Movement from Ludhiana district was Babu Santa Singh. On joining the revolutionary movement in 1922, he became its Secretary . A big reward was announced for giving information regarding his whereabouts. He was arrested on June 20, 1923. For nearly two months (uptil August 8, 1923), the police tortured him in every way to make him disclose details about the Babbar Movement, but all in vain. Cases were, however, started against Santa Singh, who, along with five

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129. *Ibid.*, pp. 105-107.

130. The father of Sardar Mangal Singh originally belonged to village Gil (tahsil Ludhiana), and had settled in Lyallpur district towards the close of the 19th century.

companions, was sentenced to death. He was hanged in the Central Jail, Lahore, on February 27, 1926.[131]

Boycott of the Governor's Darbar at Ludhiana.—The Governor of the Punjab, Sir Malcolm Hailey, announced to hold a Darbar in Ludhiana in 1925. Maulana Habib-ur-Rehman decided to boycott it, for which purpose he sent for Lala Lajpat Rai by telegram. Lalaji reached Ludhiana by car at 8 in the morning at exactly the same time when the Governor was expected to arrive there. Some half a lakh of people received Lalaji at Budha Nala bridge, from which place they started in a procession towards the city.

Students of the local Khalsa School, Islamia School, Arya School and other private and government institutions had been prepared by the authorities for the reception of the Governor. But all of them joined Lalaji's procession along with their respective bands. The people surrounded the Asghar Ali Hall[132] of the Municipal Committee, where the Governor was to hold the Darbar.

Under the circumstances, the Governor could not visit the place. Lala Lajpat Rai addressed the gathering from the stage actually prepared for the Governor. Consequently the Governor suspended the Ludhiana Municipal Committee and disqualified all its members.

All India Muslim Kashmir Conference at Ludhiana.—The All India Muslim Kashmir Conference was held at Ludhiana in 1928, under the chairmanship of Pt. Moti Lal Nehru. On this occasion, some big Kashmiri Muslim businessmen drew the carriage of Pt. Moti Lal with their own hands. About a lakh of persons, both Hindus and Muslims, attended it.

Civil Disobedience Movement, 1930.—The historic Dandi March launched by Mahatma Gandhi in connection with salt Satyagrah in 1930 was a signal for a nation-wide mass movement. In Ludhiana, the Satyagrahis, led by Maulana Habib-ur-Rehman, President of the District Congress Committee, started the civil disobedience movement on April, 11, 1930, by unlawfully preparing salt at a public meeting. The local authorities used all kinds of repression to crush the movement. The public meeting, held on the night of April 22, 1930, in the Municipal Gardens, was declared unlawful and lathi-charged.

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131. Sukhpal Vir Singh, *Zila Ludhiana de Shahid* (Punjabi), pp. 5-6. (Published by the District Public Relations Officer, Ludhiana).

Babu Santa Singh was the son of Sardar Sobha Singh of village Haron Kalan, tahsil Samrala. He was born in January, 1897. He joined the army on February 25, 1920 and resigned on January 26, 1922, to engage himself in social work.

132. It was named after Sheikh Asghar Ali, Deputy Commissioner, Ludhiana, from 30th April, 1918 to 29th March, 1919.

Hundreds of innocent men, women, children and aged persons were wounded. Sardar Kishan Singh, father of Sardar Bhagat Singh, who was presiding, was mercilessly beaten on the stage, and was arrested and put in jail. Maulana Habib-ur-Rehman was also arrested from his house on April 23, 1930 and put in jail.

Punjab Provincial Political Conference at Ludhiana.—The release of most of the political workers under the Gandhi-Irwin Pact (of March 5, 1931) brought some respite. The Punjab Provincial Political Conference was held at Ludhiana on 16-17th March, 1931. Most of the leading political leaders of the province, including Dr. Satya Pal, Dr. Kitchlew, Dr. Muhammad Alam, L. Kidar Nath Sehgal, L. Pindi Das, Sardar Kishan Singh, L. Duni Chand of Ambala, L. Duni Chand, Bar-at-Law, of Lahore, Zutshi sisters of Lahore, etc., attended it.

On Gandhiji's return to India on December 28, 1931, after attending the second session of the Round Table Conference in London, the civil disobedience movement was resumed. Hartal was observed at Ludhiana and other places in the district on January 5, 1932, on Gandhiji's arrest in the early hours of the morning.

Ch. Muhammad Hassan, Advocate, Ludhiana, was the only Muslim candidate in the whole of the Punjab, who succeeded on Congress ticket during the First General Elections to the Punjab Legislative Assembly, held in January, 1937.

In the District Board elections, held in Ludhiana district in July, 1937, 13 members out of the total number of 30 were elected on Congress ticket. Among them, 11 members were returned uncontested.

Ludhiana District Political Conference, 1938.—A district Political Conference was held at village Gujarwal (tahsil Ludhiana) early in 1938. It was presided over by Maulana Hussain Ahmad Madni (of Deoband, district Saharanpur, U.P.) and was attended among others by Shri Sri Krishan Sinha, the then Chief Minister of Bihar and Shri Mohan Lal Saxena, then member, Central Legislative Assembly. Such a big conference had not so far been held in any rural area in Ludhiana district. The Government viewed with disfavour any political activity in the Gujarwal region which was the centre of the Grewals, who were generally employed in the army and other Government departments. The conference was, however, successfully organised through spontaneous public support.

States People's Conferece at Ludhiana, 1938.—The States People's Conference was held at Ludhiana in 1938, under the chairmanship of Pt. Jawahar Lal Nehru.

Individual Satyagrah of 1940.—Ludhiana district also participated in the individual civil disobedience movement started by Gandhiji towards the end of 1940. A notice regarding those intending to offer Satyagrah was given to the Deputy Commissioner and the Superintendent of Police, Ludhiana, and the Chief Secretary to Government, Punjab, intimating the date, time and place of the Satyagrah. In some cases, arrests were made before the Satyagrah, but generally persons were arrested while actually offering Satyagrah. Nearly three hundred individual Satyagrahis were arrested in the district.

'Quit India' Movement, 1942.—The 'Quit India' Resolution of August, 1942, and the strong measures adopted by the Government to check the upsurge of popular feelings all over the country produced good response to the mass struggle for independence in Ludhiana district as well. Great enthusiasm prevailed among the people. It increased in direct proportion to the repression on the part of Government to crush the movement. About 475 persons were sent to jail.

VII. Goa Operation, 1961

Among the notable military personnel who distinguished themselves in the Goa operation in 1961, Major Shiv Dev Singh Sidhu and Lt. Vijay Kumar Sehgal, who hailed from Ludhiana district, deserve special mention.

Major Shiv Dev Singh Sidhu

Born in a progressive Sikh family of Sidhwan Khurd in 1926, Shiv Dev Singh showed inclination for military career from boyhood. Having received his early training at King George's Military School, Jullundur, and Officers' Training School, Mhow, he was commissioned in 1945. As an officer attached to the 7th Light Cavalry, Shiv Dev Singh accompanied the regiment to Japan in 1946 and returned to India after a year. The incursions of Pakistani raiders into Kashmir in 1947 found Capt. Shiv Dev Singh and the regiment on active duty in the State. Shiv Dev Singh distinguished himself as Squadron Officer, Intelligence Officer and Adjutant of the regiment which played a prominent part during the operations against the tribal raiders in the Zojila Pass and successfully cleared it despite stiff resistance.

In December 1961, Major Shiv Dev Singh was sent to Goa as Officer Commanding of the Squadron of the 7th Light Cavalry. Through his daring and dash, troops under his command overcame all obstacles created by the enemy. The Squadron pushed twenty five miles into Goa and reached Betim ferry site, about 500 yards away from Panjim with the river in between. The sudden appearance of the Squadron under Major Shiv Dev Singh opposite Panjim made the Portuguese sue for peace. In a letter written in Portuguese, Major Sidhu was requested to arrange for talks to finalise surrender to the Commander of

Indian forces. The communication was forwarded to the Commander of the Batallion and a reply thereto was required to be awaited.

During reconnaissance of the surrounding area Major Shiv Dev Singh was informed about 50-60 nationalists held as captives by Portuguese in the nearby Aguada fort. In his desire to rescue the patriotic Goanese, Major Sidhu and Lt. V.K. Sehgal directed the patrol to Aguada fort. The garrison refused to surrender and opened fire on the Indian party. Major Sidhu tried to cover Lt. Sehgal wounded by a grenade near the gate. While he was engaged in this hazardous operation to help Lt. Sehgal, a mortar shell burst near Major Sidhu and killed him. The boldness and self-sacrifice of Major Sidhu saved the nationalist prisoners from being massacred. The action of Major Sidhu showed exceptional courage, leadership, disregard of personal safety and devotion to duty in the service of the country of which Ludhiana may well feel proud.

VIII. Heroes of NEFA and Ladakh Campaigns (1962-63) and Indo-Pakistan Conflict (1965)

Like those from the rest of the country, the military personnel from Ludhiana district displayed conspicuous valour and devotion to duty in the NEFA and Ladakh campaigns against the Chinese aggression in 1962. Seventy-six persons were reported to have been killed or missing.

Among those who showed significant courage, determination of a high order and devotion to duty, special mention may be made of the following :—

(1) *Major General Rawind Singh Grewal, (Mahavir Chakra, Vishisht Seva Medal Class I) of Village Bahadarke, tahsil Ludhiana.*—Major General Rawind Singh Grewal was commissioned in 1937. He served in South East Asia Command during World War II and was awarded the Military Cross and also mentioned in despatches on two occasions. He was transferred to the Army Ordnance Corps in 1951 and held the appointment of Brigadier AOC, Western Command. He was transferred to the Infantry in July, 1958, and posted as Provost Marshal at Army Headquarters. He held command of three Infantry Brigades in Jammu and Kashmir before being promoted as General Officer Commanding of an Infantry Division.

After taking over command of a Brigade in Ladakh, in December, 1960, he carried out a number of reconnoitring operations in difficult terrain and extreme climatic conditions. His personal efforts, timely action and the valuable information brought by him helped in the establishment of our forward posts and stabilising the situation in Ladakh. His personal example,

cheerfulness and courage infused in his troops the determination to maintain their position in difficult conditions. His conduct was commended to have been a model of sacrifice, courage and devotion to duty.

(2) *Major Ajit Singh (Mahavir Chakra), of Ludhiana.*—With overwhelming Chinese build-up opposite Hotspring and the post at Nulla Junc having fallen to the enemy, Major Ajit Singh was asked to fall back to Tsogsalu in order to organise a more co-ordinate defence there. He, however, asked that he and his men be given an opportunity to fight and retake the post at Nulla Junc. He was permitted to execute his plans. Nulla Junc was reoccupied by his men. The Hotspring post was also defended and continued under our control. It was only when he was subsequently ordered to withdraw from these posts in view of the continued enemy build-up opposite Hotspring and reports of enemy infiltration into Marsmikla that Major Ajit Singh left his posts to take up defensive positions in the rear.

Major Ajit Singh displayed great courage and leadership during these operations.

(3) *Lance Naik Sarwan Singh (Sena Medal), of village Begowal, tahsil Ludhiana.*—On 18th November, 1962, the Chinese forces attacked Gurung Hill in overwhelming strength. Lance Naik Sarwan Singh was attached to the Artillery Observation Post which controlled and conducted the defensive fire from our guns. The Observation Post Officer was wounded and many other personnel were either killed or wounded in action. Undaunted by these casualties, Lance Naik Sarwan Singh continued to perform his duty with great courage in the face of heavy enemy fire. This enabled the Observation Post to bring down effective fire from our own artillery on the attacking enemy.

During this action, Lance Naik Sarwan Singh displayed courage and devotion to duty of a high order.

Ludhiana district displayed remarkable zeal and enthusiasm during the Indo-Pakistan conflict of August, 1965 also. Like people all over the State, the response to the call of the nation was spontaneous and substantial. Fullest support was given to the authorities in the war effort and the public showed commendable example of solidarity and spirit of service and sacrifice for the country.

The following heroes from the district distinguished themselves during the Indo-Pakistan Conflict:—

1. Lieut.-General Joginder Singh Dhillon	*'Padma Bhushna'* XI Corps Commander, village and Post Office, Bairsal, District Ludhiana.

2.	Major-General Joginder Singh	'*Vishishta Sewa Medal Class I*' Chief of Staff, Western Command, village Malhipur, Post Office Doraha, District Ludhiana
3.	Major-General Amrik Singh	'*Vishishta Sewa Medal Class I*' Army Headquarters, Village and Post Office Machhiwara, District Ludhiana
4.	IC-8041 Lieut.-Col. Sampuran Singh	*Mahavir Chakra and Vir Chakra*' Punjab Regiment, Village and Post Office Bassian, District Ludhiana
5.	IC-4466 Major Bhupinder Singh	'*Maha Vir Chakra*' (*Posthumous*) 4th Hodson Horse, village Harnampura, Post Office Sahnewal, District Ludhiana
6.	JC-5234 Ris. Achhar Singh	'*Vir Chakra*' (Deccan Horse 9th Horse) village Kaila, Post Office Halwara, District Ludhiana
7.	JC-18114 Ris. Kartar Singh	'*Vir Chakra*' (*Posthumous*) Armoured Corps, village and Post Office Nathowal, District Ludhiana

सत्यमेव जयते

The total number of military personnel from Ludhiana district killed during Indo-Pakistan Conflict was eighty-seven.

APPENDIX

GHADAR REBELLION OF 1915

Revolutionaries belonging to Ludhiana District tried and convicted by Special Tribunals [133]

Persons tried in the First Lahore Conspiracy Case and sentenced to death with forfeiture of property. Their death penalty was, however, commuted by the Viceroy into life imprisonment :

No.	Name	Village	Penalty
1	2	3	4
1	Nand Singh ..	Kaila	..
2	Rulia Singh ..	Saraba	..

Revolutionaries awarded life imprisonment and sent to the Nicobar and Andaman Islands. Their assets were also forfeited by the Government:

1	2	3	4
1	Bhan Singh ..	Sunet	..
2	Chuahar Singh ..	Lilan	..
3	Gurmukh Singh ..	Lalton	..
4	Inder Singh ..	Mallah	..
5	Kharak Singh ..	Bopa Rai	..
6	Kirpal Singh ..	Bopa Rai	..
7	Puran Singh ..	Isewal	..

Persons who received varying terms of imprisonment:

1	2	3	4
1	Deva Singh ..	Nandpur	4 years' R.I.
2	Kishan Dass ..	Babarpur	Until rising of the court

133. Khushwant Singh and Satindra Singh, *Ghadar* (1915), (New Delhi, 1966), pp. 61–94.

Person awarded death sentence with forfeiture of property in the First Supplementary Lahore Conspiracy Case and hanged:

1	2	3	4
1	Uttam Singh ..	Hans	..

Persons, accused of the Second Lahore Conspiracy Case, sentenced to transportation for life with forfeiture of property:

1	2	3	4
1	Arjan Singh ..	Jagraon	..
2	Dalip Singh ..	Phullewala	..
3	Harbhajan Singh ..	Chawinda	..
4	Harnam Singh ..	Gujarwal	..
5	Inder Singh ..	Sheikh Daulat	..
6	Jagat Singh ..	Gujarwal	..
7	Karam Singh ..	Kotala Ajner	..
8	Lal Singh ..	Narangwal	..
9	Mohinder Singh ..	Majri	..
10	Mastan Singh ..	Narangwal	..
11	Nahar Singh ..	Gujarwal	..
12	Ram Singh ..	Phullewala	..
13	(Sant) Randhir Singh ..	Narangwal	..
14	Sajjan Singh ..	Narangwal	..
15	Surjan Singh ..	Gujarwal	..

Person sentenced to various terms of imprisonment in the Second Lahore Conspiracy Case:

1	2		3	4
1	Kahan Singh	..	Hasanpur	4 years' R.I.

Person awarded death sentence with forfeiture of property in the Second Supplementary Lahore Conspiracy Case and hanged:

1	2	3	4
1	Hafiz Abdullah (of Manila)	Jagraon	..

Revolutionary awarded life imprisonment with forfeiture of property in the Second Supplementary Lahore Conspiracy Case:

1	2		3	4
1	Kehar Singh	..	Sahnewal	..

Ghadarites awarded death sentence with forfeiture of property in the Mandalay (Burma) Conspiracy case and hanged:

1	2		3	4
1	Chalia Ram	..	Sahnewal	..
2	Narain Singh	..	Sangatpura	..
3	Pala Singh	..	Sherpur	..

Persons awarded life imprisonment with forfeiture of property in the Mandalay Conspiracy Case :

1	2	3	4
1	Kapoor Singh ..	Mohi	..
2	Hardit Singh ..	Lamma	..

Person awarded death sentence with forfeiture of property in the Second Mandalay Conspiracy Case and hanged :

1	2	3	4
1	Amar Singh (Engineer) ..	Sherpur Kalan	..

CHAPTER III

PEOPLE

PART A

(*a*) *Introductory*.—Territorially Ludhiana forms a part of the Malwa region (the tract situated between ancient Saraswati or modern Ghaggar and the Satluj) and its people are, therefore, known as *Malwais*. The name has come down from early times and has got an interesting origin. While describing the present day people of Ludhiana it will be pertinent to give a brief sketch of the people, their manners, customs and special characteristics as have been gleaned from ancient religious books and literature. According to Panini, the famous Sanskrit Grammarian, the Kashtrya rulers of Janpadas in ancient India generally gave their names to the regions where they lived. Thus the name of the region Malwa or that of the people *Malwai* is derived from the aristocracy, which ruled over the people settled there.

In the later Vedic period a tribe called *Madra* dominated the Punjab. The name, however, does not occur in the Rig Veda. Panini mentioned two sections of *Madras*, Upper *Madra*, inhabiting the Gujrat district between the Jhelum and the Chenab, and *Purva Madra*, settled in the Gujranwala and Sialkot districts between the Chenab and the Ravi. Their capital Sakala (Sialkot) was situated on the bank of Apaga or the present Ayek. Their social organisation was marked by unrestrained intermixture of classes. Among them a barber could become a Brahman and a Shudra could become a Kashtrya and *vice versa*. There was no hard and fast distinction between a free man and a slave. The above description is given in Mahabharata, where Karana assails them for their low morals and crude practices.

The *Madras*, who ruled in the Punjab to the west of the Ravi were believed to be people of Iranian extraction. Their strange costumes, banners and armaments and outlandish chariots and conveyances further showed that they did not very well fit into the traditional Indian way of life. In due course of time the name *Madra* became changed into *Bhadra*, because Panini treats them both as synonymous. In the Prakrit form both the words *Madra* and *Bhadra* seem to have been converted into *Malla* and *Bhalla*. Malwa is a popular variant of *Malla*. The connection between the *Madras* and *Malwas* is proved by the tradition of their descent from the *Madra* King Ashvapati, as recorded in the Mahabharata. The Mahabharata has placed the *Malwas* in the east Punjab or the area situated between the rivers Satluj and Yamuna. There is evidence to show that the *Malwas* dominated the Cis-Satluj area,

which has eversince assumed the said name. The Greek writers described the *Malwas* as *Malloi*. Curtius observes that they were usually at war with each other but, in the face of the Macedonian invasion "drew together in the presence of the common dangeı". It is added that they "cemented their alliance with other peoples by inter-marriage, each nation taking or giving in exchange 10,000 of their young women as wives".[1]

In the Mahabharata the *Malwas* are described as formidable warriors. Their main body joined the Kaurvas and valiantly fought on many crucial occasions. They are mentioned as the vanguard of the army supporting Bhisham Pitama. In the Darona Parva they are shown to be in front of Daryudhana and in the rear of Karna. The great epic is replete with the accounts of the valour, heroism and military skill of the *Malwas*. According to Mahabharata the *Malwas* not only excelled in the use of arms but also cherished high moral standards, which are clear from the dialogue which princess Savitri had with Yama on the death of her husband, Satyavan.

With the rise to power of the Paurvas in ihe region between Jhelum and the Ravi in about fourth century B.C. the *Mallas* or the *Malwas* were concentrated in the south Punjab. At the time of Alexander's invasion they along with their kith and kin shifted to the areas between Ravi and Satluj and extended as far as the junction of the Satluj with the Indus in the neighbourhood of Uch. The territory became the stronghold of the Mallas and came to be known as Mallusthan, the name which subsequently seems to have changed to Multan.

The *Malloi* or the *Mallas* gave a tough fight to Alexander when he invaded this region. After taking the citadel of Kot Kamalia, Alexander continued his march, travelling a great distance in ihe night, and arrived on the bank of the Ravi at day-break. He crossed the river and pursued the fugitive *Mallois* who took shelter in the fortress of Tulamba near Kot Kamalia on the high road to the Malwa capital of Multan. Though defeated against the superior generalship and military strategy of Alexander, the *Mallois* injured Alexander in the fierce fight inside the citadel. It was a *Malwa* marksman "who shot an arrow which burst through Alexander's breast plate into his ribs above the pap. A gush of blood sallied from his chest and Alexander collapsed in a swoon". The account of the war between Alexander and the *Malwas* clearly shows that the people were brave, warlike, freedom loving and of uncommon height and dignified bearing. "Riding glittering chariots and wearing robes of linen embroidered with inwrought gold and purple they looked like personifications of gallantry and heroism" but they were so much isolationists and self-contented that they could not organise any effective defence until the Macedonians had pounced upon them.

1. *Glimpses of Ancient Punjab* by Dr. Budha Parkash, page. 37,

After the retreat of Alexander the *Malwas* readily joined the upsurge that swept off the Greek rule from the Punjab and led to the establishment of the Mauryan empire. After the break up of the Mauryan empire, the Greeks living in Bactria once again invaded and occupied the Punjab in the second century B.C. The *Malwas* appear to have been divided and under their pressure migrated from south Punjab to Rajasthan in the Jaipur—Tonk area as has been proved by a large number of Malwa coins discovered in the area.[2] In their new home they jealously guarded their freedom against the inroads of the Scythians. From first century B.C. to about third century A.D. they resisted the invasions of these prople and at times won significant successes. They most probably started the Krta era which came to be known as the Malwa era in commemoration of some great triumph against the Sakas.[3] Not content with defensive action alone they expanded towards Gujrat at the cost of the Saka satraps of the place.[4] As a result of their conquests and settlement, the valley of the river Mahi in Gujrat (Kathiawar) also came to be known as Malwa. Later on this region became the cradle of Parmar Rajputs of Agnikul origin, but as a result of their mixture with the local people they also became known as *Malwas*. Even now-a-days some 'Gotras', such as Sekhon, Bal, Deol, Aulakh and Chime trace their ancestry to the Parmars.

The rise of the Imperial Guptas brought about political changes of considerable significance. Samudragupta put an end to the Saka rule from Mathura to Vidisa, as proved by his coins discovered there. The whole of East Malwa was annexed to the Gupta empire. His successor Chandragupta II Vikramaditya, extripated Saka rule from west Malwa as well. A Verman ruling House, which used the Krta era, was set up there. The fact goes to the credit of the Malwas, who stuck to their old tradition and continued the use of their era, dress, manners, styles and standards. Towards the close of the fifth century A.D. the Guptas replaced the Verman ruling house by the Vardhana kings. In the beginning of the sixth century A.D. the Hunas invaded this region and conquered it along with east Malwa. Their advance was effectively checked by Yashodharman Vardhana, who occupied the whole area from Kalinga to Kashmir. The Vardhanas continued to use the Malwa or Krta era.[5]

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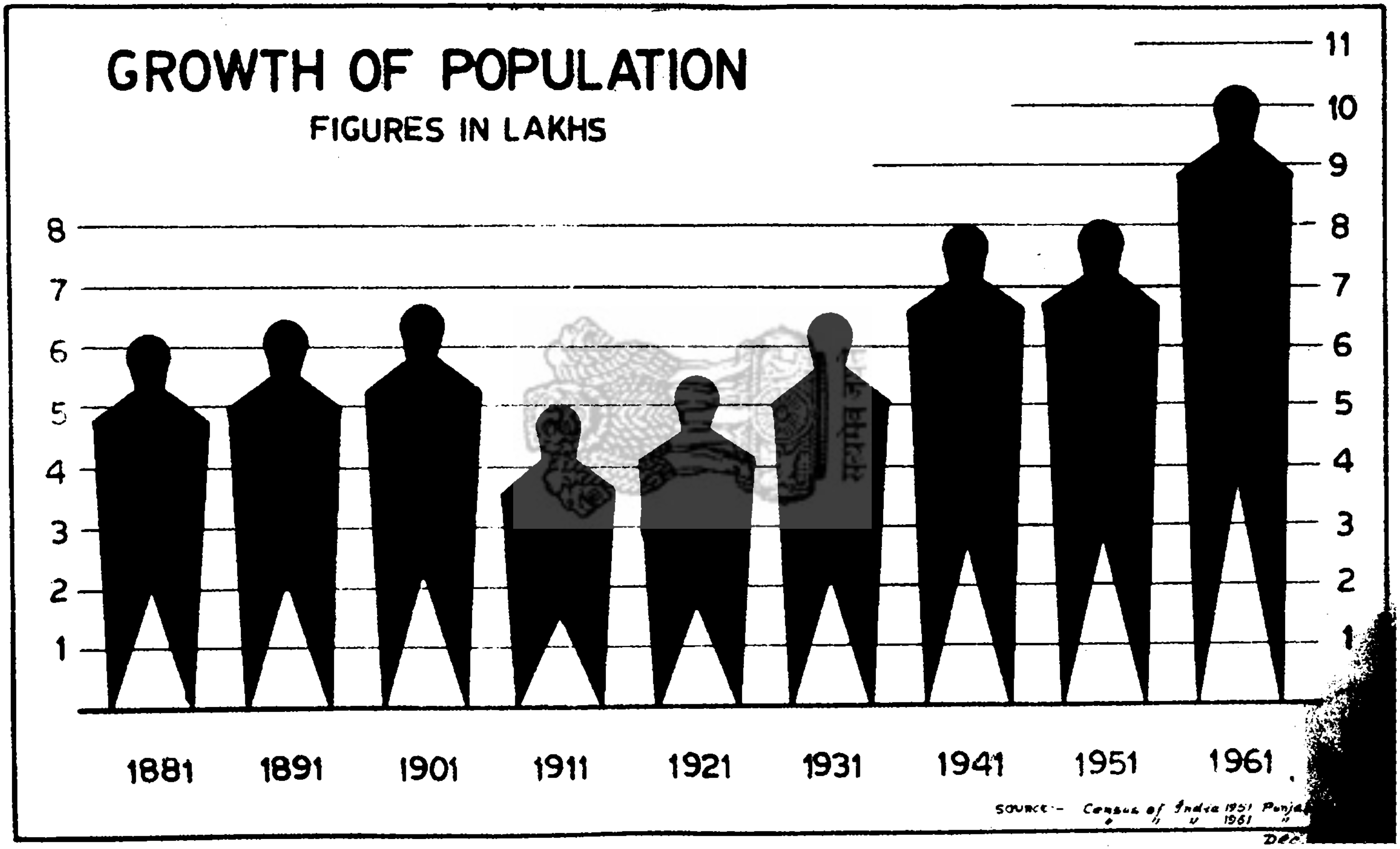
2. D.C. Sircar *Ancient Malwa And the Vikramditya Tradition*. p. 9

3. The town of Malaudh, a corrupted form of '*Mall* Uday'-rise of the *Mallas*, perhaps owes its establishment along with the fortress to some such great victory of the *Mallas* against the foreigners.

4. D.C. Sircar, *Ancient Malwa And the Vikramaditya Tradition*, p. 7

5. *Ibid*, p. 17


GROWTH OF POPULATION
FIGURES IN LAKHS
1
2
3
4
5
6
7
8
9
10
11
1881
1891
1901
1911
1921
1931
1941
1951
1961

From the brief introductory account it will be abundantly clear that the names Malwa and *Malwai* come down to us from very ancient times. They had settled to the east of the Ravi and occupied the Cis-Satluj region, which is still known as *Malwa*. As such, the people of the region came to be known as *Malwais*. With the advent of the Muslim rule once again large scale dispersal of population and settlement of the new comers in the district took place. Still the name of the region and the people has got its own historical significance. The indigenous stock has retained some traditional characteristics-tall stature, well-chiselled features and special interest in physical prowess continued to be the distinguishing features of the typical Malwa people.[6]

(*b*) *Total Population.*— The census figures of the district give its population in 1881 as 6,18,835. In the year the district comprised four tahsils, viz., Ludhiana, Jagraon, Samrala and Pakhowal. The number of tahsils was subsequently reduced to three by incorporation of Pakhowal areas with the others. In 1948, the district lost an area 65.88 square miles (168.65 sq. kms.) along with population numbering 16,841 to erstwhile Pepsu in pursuance of the Enclaves Act, 1948. Recently adjustment of area was again made with Patiala district and consequently Payal Sub-tahsil of Patiala district has been included in Ludhiana tahsil. An area of 89 square miles (227 sq. kms.) with population of 75,249 thus stands added to the district from November, 1963. For administrative convenience the status of Payal as sub-tahsil has been retained as hithertofore.

The following table gives the population and variations in the district for the last sixty years.—

Year		Persons	Decade variation	Net variation
1901	..	6,51,937	..	
1911	..	5,03,842	—1,48,095	
1921	..	5,53,200	+49,358	
1931	..	6,56,660	+1,03,460	
1941	..	8,01,093	+1,44,433	
1951	..	8,07,418	+6,325	
1961	..	10,22,519	+2,15,101	—3,70,582

(*Source* : *Ludhiana District Census Handbook*, 1961, p. 161).

6. The word 'Mall' used to be suffixed to the names of persons because it signified extraordinary physical strength and the man was taken for a 'Pahlwan' or a great 'Mall'.

According to the cunsus figures of 1961, out of the total population of 10,22,519 in the district 5,51,304 were males and 4,71,215 females. Following is the tahsilwise break up of population of the district :—

Name of tahsil		Persons	Males	Females
Ludhiana	..	5,62,411	3,05,273	2,57,138
Samrala	..	2,17,446	1,18,295	99,151
Jagraon	..	2,42,662	1,27,736	1,14,926
Payal (Sub-tahsil, attached in 1963)		75,249	40,840	34,409

Causes of population fluctuations:—Diseases and famines have in the past been largely responsible for high fluctuations in the population. Punjab had a very severe famine in 1783-84 which is popularly known as "*chaurasia kal*". The whole stretch of country from Satluj to Allahabad was affected. Famines again occurred in 1833-34, 1837-38, 1860-61, 1869-70, and 1877-78. Out of the famines of the 19th century none except that of 1833-34 appears to have affected the population of the district in any marked manner. The scarcity of food in 1860-61 was mainly due to the unstable conditions then prevailing in the district as a result of the 'Great uprising of 1857' which caused great restlessness in the area. Epidemics also wrought havoc to the people quite often. The plague, which had appeared for the first time in the Punjab in 1901 greatly reduced the population in the first decade of the 20th century. In the second, decade too, plague, cholera and influenza affected the growth of populaion. The details of the heavy toll taken by the epidemics are not available, but the figures of the heavy mortality caused by plague in the opening years of the 20th century are on record. The figures given below would clearly show the effect of plague on the population of the district from 1901—04 :

Population in 1901 (March 1st to the end of the year)	..	6,73,097
Add:--		
Births in 1901 (March 1st to the end of the year)	..	19,656
Births in 1902 (March 1st to the end of the year)	..	24,714
Births in 1903 (March 1st to the end of the year)	..	28,752
		73,122
Total	..	7,46,219

Deduct :—

Deaths in 1901 (March 1st to the end of the year)	..	31,323
Deaths in 1902 (March 1st to the end of the year)	..	69,915
Deaths in 1903 (March 1st to the end of the year)	..	36,972
		1,38,210
Population on January 1, 1904	..	6,08,009

The second decade of the present century witnessed steady increase in the population despite the epidemics of cholera and influenza. The third decade was without the outbreak of any epidemic. In the fourth decade the partition of the country took place. Muslims of the district migrated enmasse to West Pakistan and similarly Hindu and Sikh displaced persons from West Pakistan migrated to India . The number of these migrants in the district was not equivalent to the number of the Mohammadans who had gone out of the district. The displaced persons who have settled in this district numbered 1,69,267. There were only 3360 Muslims left in the district in 1951 against the muslim population of 3,02,482 in 1941. In this decade the boundaries of the district were also reduced from 1399 square miles to 1279 square miles due to the transfer of certain areas to the Patiala district of erstwhile Pepsu. The fifth decade witnessed the steady increase in population both in rural as well as urban areas.

Density of Population.—The increase in the population was 1 per cent during the decade 1941—51. The increase in the population during the decade 1951—61, however, has been about 2.7 per cent per annum. The following table shows the density of population in the district :—

Year	*Density of Population per sq. mile*
1881	422
1891	464
1901	510
1911	394

Year	*Density of Population per sq. mile*
1921	433
1931	514
1941	627
1951	632
1961	773

(*Source* : *Census of India* 1951, Vol. III, Part 1-A, p. 9 and *Census of India* 61, Vol. XIII, *Punjab* Part II-A).

The notable feature in this regard is that towns of Ludhiana district are, on the whole, twice as congested as those in rest of Punjab, the urban density of district being 18,246 as against 9,476 of Punjab. Raikot has the highest density of 33,056. Next comes Ludhiana with the figure of 32,152. Khanna is the least congested with density of 3,221.

The proportion between rural and urban population in 1961 was 69.2 and 30.8 against 75 and 25 in 1951. It indicates the general trend of the population to settle in the urban areas. Rapid industrialisation of Ludhiana, among other reasons, is the main factor responsible for this steep rise. The allurement of jobs for the artisan classes and more profits in industry for enterprising tradesmen are great stimulants for the rural population to shift to the urban areas.

Population of Towns in Ludhiana District

	1901	1911	1921	1931	1941	1951	1961
Ludhiana ..	48,649	44,170	61,880	58,586	1,11,639	1,53,795	2,44,032
Jagraon ..	18,760	15,039	17,731	27,108	26,704	24,519	29,617
Raikot ..	10,131	7,510	8,379	11,810	13,777	10,193	11,239
Khanna ..	3,838	3,319	..	6,555	7,941	12,646	24,416
Samrala ..	..	..	.	.	..	4,734	5,49

(*Source*: *Census of India* 1951, Vol. III, Part I-A.P., *Ludhiana District Census Handbook*, 1961, DCH No. 11, p. 28, LXXXV).

There are five towns in the district. Ludhiana registered an increase of 58.67 per cent during 1951—61. During the same period Jagraon, Raikot, Khanna and Samrala registered an increase in population by 20.79, 10.26, 93.7 and

14.89 percent respectively. The notable increase in population pertains to Ludhiana and Khanna. No new town, however, emerged during the last 50 years. Machhiwara, once having a class II Municipality constituted towards the end of the 19th century has, however, been pushed into oblivion due to elimination of transport of goods by rivers consequent upon the opening of railways and construction of roads.

Emigration and immigration.—Normally the inhabitants of one district shift to another on account of service, purchase of land and marriages. The inhabitants of this district have been, in particular, contracting marriages in Ferozepore, Jullundur, Hoshiarpur and Amritsar districts. In recent years residents of other districts have also been shifting to Ludhiana on account of its industrial importance. Ludhiana is also attracting labour from adjoining States, particularly Uttar Pradesh and Rajasthan. The decade 1940—50 had an important impact on the district due to partition as it recorded the migration of Muslims of the district to West Pakistan and the settling of Hindus and Sikhs of West Pakistan

3,02,482 Muslims left Ludhiana district in 1947 and migrated to West Pakistan and in their place 1,69,267 Hindu and Sikh migrants settled in the district. This mass shifting also reduced the density of population in the rural areas of the district whereas it slightly increased in the urban areas. Detailed information about immigration of persons into the district from various parts of Pakistan after partition is given hereunder:—

Serial No.	District of origin	Persons	Males	Females
1	Dacca	14	11	3
2	Lahore	11,829	6,368	5,461
3	Sialkot	10,864	5,861	5,003
4	Gujranwala	7,487	4,074	3,413
5	Sheikhupura	7,661	4,362	3,299
6	Gujrat	5,637	3,191	2,446
7	Shahpur	16,099	8,118	7,981
8	Jhelum	2,509	1,407	1,102
9	Rawalpindi	5,909	3,517	2,392
10	Attock	5,447	2,907	2,540
11	Mianwali	851	443	408

Serial No.	District of origin	Persons	Males	Females
12	Montgomery	18,510	9,629	8,881
13	Lyallpur	52,075	27,869	24,206
14	Jhang	7,712	4,103	3,609
15	Multan	7,045	4,103	3,609
16	Muzaffargarh	735	408	327
17	Dera Gazi Khan	860	409	451
18	Biloch-Frontier Tract	54	24	30
19	Gurdaspur	182	110	72
20	Dadu	29	19	10
21	Hyderabad	44	40	4
22	Karachi	179	110	69
23	Nawabshah	65	60	5
24	Upper Sind Forntier	200	134	66
25	Hazara	433	236	197
26	Mardan	398	227	171
27	Sukkur	206	126	80
28	Tharparkar	40	35	5
29	Sind	77	17	60
30	Peshawar	1,048	486	562
31	Kohat	179	123	56
32	Bannu	88	44	44
33	Dera-Ismailkhan	87	66	21
34	Quetta	179	107	72
35	Bilochistan	6	4	2
36	Bahawalpur	3,488	1,944	1,544
37	Sylhet	1	..	1
38	Burnt Slips	1,040	..	1,040
	Total	1,69,267	90,645	78,622

(*Source* : *Ludhiana District Census Hand Book*, 1951 DV, P. XXVIII.)

(b) Language.—The major portion of the district is known as Malwa. Only the eastern part is called Pawad. In the Malwa region *Malwai* is spoken while the dialect of the eastern part is *Pawadi*. Since the number of persons speaking *Pawadi* is small, it can be said that Malwai is generally spoken in the Ludhiana district.

Malwai dialect does not differ much from the standard Punjabi. Certain rules of grammer of standard Punjabi appear to have been framed keeping in view the Malwai form of the dialect. Only next to Doabi, Malwai dialect resembles very much the standard Punjabi. Despite this, it has certain peculiarities of its own. The persons belonging to Malwa can be easily recognised on account of the dialect spoken by them. There are certain words used only in Malwa, some pronounced in a preculiar way even though also used in the standard Punjabi to enable one to tell that the dialect is Malwai.

Consequent upon the partition of the Punjab, displaced persons from Pakistan migrated to Punjab (India). Their large scale migration has produced marked impact on Malwai dialect in the urban areas of the district. As a result, both the literate and majority of semi-literate persons comprising about 30 percent population of the district residing in urban areas speak standard Punjabi. The local population even in urban areas, however, speak Malwai. The majority of population, i.e., 70 per cent reside in the villages, their accent has not, however, much changed and they continue to speak Malwai. The only notable event after the partition worth mentioning for Malwai dialect is that it has absorbed several words of West Pakistan dialects and of English language.

It is really difficult to mark strictly the area from where the lanuage is changed from one form to another. But still, some broad indications can be given to distinguish the variations in dialects spoken in different areas. For instance, in Jagraon tahsil clear Malwai is spoken. In the Samrala tahsil some words of Powadi have crept in. In Payal Sub-tahsil the language spoken contains more words of Powadi spoken in Malwai accent. There are certain words which are not spoken elsewhere. In Khanna area of Samrala tahsil the pronunciation of some words stands changed from that spoken in Jagraon tahsil. Despite all these differences, it is not difficult to recongnize the dialect as Malwai and the Malwai speaking persons can follow it without difficulty.

The following few instances clearly distinguish the Malwai dialect from standard Punjabi. On account of these peculiarities Malwai still enjoys special character. The principal peculiarity of Malwai is that a dental 'l' and 'n' are substituted as ḷ and ṇ. Thus in Ferozepur we have *jana* "not' *jānā,* to go; *hun* not huṇ, now *nal* not *nal* with, *kol* not *koḷ,* near. There are certain words where l is not changed into ḷ. For instance in standard Punjabi the word *toli* is not changed into *toḷi* (group) and *koli* into *koḷi* (dish) in Malwai. In Malwai dialect it is found that there is some influence of Hindi on Malwai and the words *ka, ke, ki* of Hindi language are added to Malwai. For instance *nane ke ghar* is changed into *nanke, Pyode* ghar is changed into Peoke. In certain cases vowels are not pronounced in Malwai. *Almari, ikatha, akela, akhand path, anand karaj* are pronounced as l *mari, katha, kela, nand karaj.* In certain cases the word

starting with l is changed into *n*. In Manjha *lambardar, lun, langna* are changed in *nambardar, nun* (salt) *nangna* (pass) in Malwai. Certain words having penultimate alphabet v/w in standard Punjabi are changed into *m. Tewin, Jewain, kewin, Daswan* are changed into *temi* (women), *jamen* (such as) *keme* (how) and *dasma* (tenth).

In standard Punjabi certain words ending with 'r' are pronounced in Malwai language without 'r'. *Puter* (son), *suter* (correct or spun cotton), Muter (urine) are pronounced as *put, sut* and *mut*. One most notable change is of v into b in Malwai language. For instance *vakil, vehra, wehrka* are pronounced as *bakil* (lawyer) *behra* (compound) and *behraka* (calf).

There are certain other peculiarities in Malwai language which are not found in standard Punjabi or Doabi. There is a tendency to use word *il, ul* in many words after the standard Punjabi word, i.e., *sindul, gittal* (derived from Punjabi *sind* and *gita*). There are other words which are only spoken in Malwai. *Thoda* and *sada* spoken as *tohada* (yours) *asada* (ours) in standard Punjabi, *thouthon, tuhade kolon* (from you) instead and *thonu* in Malwai (to you) are not noticed to be in use any where except Nabha. In some cases plural is used in singular form *Apan tan mauj karde han* (I am enjoying) infact means *main tan mauj karda han*. The standard Punjabi words *chuk* (to carry), *sut* (throw) and *put* (dig) are pronounced as *chak* , *sit* and *pat* in Malwai irrespective of any form or rule.

Certain words as *khora* , *lowne* (how, bring) are used in Malwai. The use of these words is not found in standard Punjabi, Majhi and Doabi.

Some meaningful words of standard Punjabi are sometimes used in Malwai in utter disregard of their correct meaning in a casual manner. *Sala* (brother-in-law) is frequently used. A father would say to his son, *sala kam nahin karda* (he does not work) and similarly would say to his daughter *sauhri pardhi nahin* (she does not study). The word *souhra* (father-in-law) *mama* (maternal uncle) are also similarly used at times.

The words joining system in Malwai is not the same as in *Lehndi boli*; but still it is significant. *tethon* from *tere kolon* (from you) *methon* from *mere kolon* (from me) are such instances.

The words *ga, ge, gi* (will) commonly usedfor future tense are sometimes used in Malwai language for past tense. *Akhya ta se ga cheti aain* (had told him to come early) is an instance where the word *ga* has been used in past tense.

1,69,267 displaced persons who migrated from west Pakistan settled in 1947-48 in rural and urban areas of the district. As they belonged to different districts in west Punjab, Sind, Bilochistan and upper Sind, they carried

with them their own languages and dialects. As such standard Punjabi, Lehndi, Bhattiani, Pothohari, Sindhi, pastho (pukhto) etc., are also spoken amongst the immigrants. They have also adopted the Malwai dialect. They use certain words of standard Punjabi instead of their Malwai equivalents. Their coming to east Punjab has produced definite impact on Malwai dialect; but has not efffected any marked change therein. Malwai, however, has not been able to replace the dialect spoken in the homes of the new comers. In rural and urban areas we usually come across migrant cultivators and shop-keepers speaking in their own dialects without resorting to Malwai or its accent. Their children, however, freely speak Malwai, but at the same time keep alive their own ancestral language and speak their own dialect in their homes and amongst their friends whose parents have also migrated from the same districts.

After the partition the Malwai dialect has adopted many new words from other languages. The words refugee, allot claim, tampoo, bhapa, etc., from English and Pothohari have been included in the vocabulary. These are, of course, spoken in Malwai accent.

Bawrias, Sikligars and others from eastern U.P. and Rajasthan speak their own dialects. The migration of labour from eastern U. P. is of very recent origin. Influx of persons from Rajasthan into the district is not of recent arigin; but they do not stick to any particular place. They are mobile in general and as such their accent stands unchanged. Bawarias and sikligars speak their own .dialects. Their dialects have been derived from earlier languages. Their dialect is, therefore, of north Indian origin. Their prolonged stay in the district has affected their accent. They speak their own dialects in Malwai accent. One can easily single out Bawarias and Sikligars belonging to Malwa immediately by conversing with them in their own dialects. They have no doubt adopted several Malwai words as well.

The dialect of residents of Payal Sub-tahsil, though originally Malwai, is an admixture of Pawadi. As already indicated, there is no clear delineation of areas on the basis of dialects. The border areas of one dialect suddenly merge with areas having a different dialect. Payal sub-tahsil may be said to be border area of Malwai language and Pawadi. *Si* (was) of Malwai language is changed here into *ti* of Pawadi language and so on.

The language of the district as a whole is undoubtedly Punjabi. As the mass propogation of Punjabi is of recent origin the older sections of population, except Sikhs, are not very proficient in the language. About 50 years ago this language was taught only in *Gurudwaras* and *Dharamsalas*. It has, recently been started as medium of instruction in the entire district. Though it is the language of overwhelming numbers of the population, it is strange that mostly urdu newspapers are still read in the district. English and Punjabi newspapers are as yet read on a restricted scale.

The Government administration is carried on in English and in Punjabi. At the district level it is run in Punjabi. Correspondence with Punjab Governmet is done in English[7]. At district level Punjabi has practically replaced urdu. The Government employees are also required to possess adequate knowledge of Punjabi and to have passed the examination in Punjabi of the prescribed standard.

Commercial work is not carried on in Punjabi. Business Accounts are generally maintained in English. Urdu knowing persons maintain their accounts in Punjabi. The Mahajans, though they are conversant with English and Punjabi, still prefer to maintain their accounts in *lande*, a script commonly used by the business community. Lande script is of many types; but the popular forms are *Mahajani* and *Amritsari.*

Advertisements by businessmen and cinemas are usually made in English and Urdu. Punjabi is now replacing Urdu since the younger generation in the district is unfamiliar with Urdu. Signboards of the shops continue to be in English and in very rare cases these are written in Punjabi. As the present trend is towards the Punjabi, the language is gaining rapid popularity as the language of public transactions. Undoubtedly there are many other factors responsible for the popularity of a language, Government patronage *inter alia* is an important factor and the Punjabi language has come to enjoy it in full measure in the State.

Religion and Castes : The details of the population of the district, religion-wise, are given below :

		Males	Females	Total
Budhists	..	176	205	381
Christians	..	1,388	1,250	2,638
Hindus	..	2,00,270	1,65,159	3,65,429
Jains	..	2,642	2,468	5,110
Muslims	..	2,834	1,852	4,686
Sikhs	..	2,43,985	3,00,281	6,44,266
Others	..	10	..	10
Total	..	5,51,304	4,71,215	10,22,519

Excluding Payal Sub-tahsil, for which religion-wise figures are not forthcoming.

(*Source* : Ludhiana District Census Handbook, 1961, pp. 252-53.)

7. Under the Official Language Act, 1967, Punjabi in Gurmukhi script has become the language of Administration at all levels with effect from 13th April, 1968.

Principal Communities.

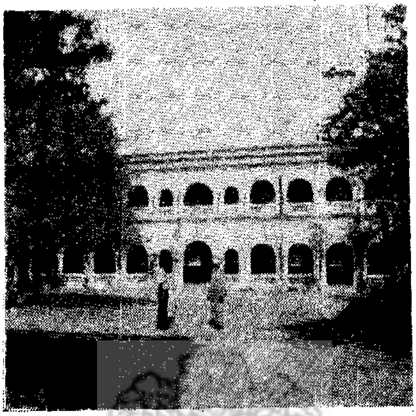
Christians.—Christians number 2,638 in the district. American Presbyterian Church was established in Ludhiana as early as A.D. 1834. They established churches, chapels, schools and hospitals. They also started the earliest printing press in Punjabi and English. The humanitarian activities impressed the people and facilitated conversion. Miss Brown did wonderful work in the hospital line and the present grand medical establishment at Ludhiana is still popularly known as Miss Brown's Hospital.

The Christians consider Bible as their holy book. The main festivals amongst them are the Easter, X-mas and the New Year's Day. The place of their prayer is church. They propagate Christianity in chapels.

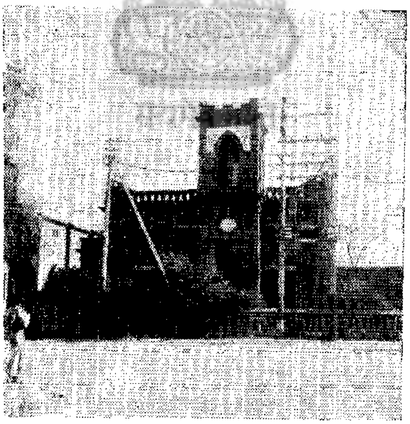
The conversion to Christianity in the district has been largely from the low caste Hindus and in rare cases from Muslims. Under the Britishers conversion also carried with it the benefits of other concessions and employment.

After independence and the exit of the Britishers, the Christian way of thinking has undergone a change. The missionaries are endeavouring to be indianised. They are making deeper probe in Indian religions and cultural heritage so as to appear to be integrated with the Indian society. Undoubtedly their spread through proselytization stands checked. Now they are mostly propagating Christianity through beneficient institutions, viz., schools, colleges, hospitals and medical colleges and also by giving certain concessions to christian families.

Hindus.—In the Census of 1961 the number of Hindus in Ludhiana district is given as 3,65,429. Hinduism in the district is hardly distinguishable from that of their co-religionists elsewhere. Strictly speaking Hinduism does not signify any specific form of religion. Instead it connotes a social system which is based on general acceptance of certain basic values of life disregardful of variations in religious beliefs of the members of the community. In its broad view of life Hinduism comprehends different variations of animism (worship of spirits) to Pantheism (oneness of God). It is also sometimes said to be a conglomerate of a hetrogenous mass of beliefs. It believes in transmigration of soul. It also believes in re-incarnations (*avtars*), people believe that God so often takes human form as *avtar* to relieve humanity of prevailing distress and suffering. It has a philosophy and metempsychosis quite independent and different from that of the Greeks. Some of the Hindus worship minor deities like *Sitla* i.e. (goddess of small pox) and different *devis* (Vaishno Devi of Jammu, Chintpurni and Jawala Mukhi). Some of them also worship Kali Devi.



Ewing Christian School, Ludhiana.



Presbyterian Church, Ludhiana

The most important group amongst Hindus is called Sanatan Dharmis. They believe in idol worship. For meditation they keep idols of gods before them. They also believe in incarnations of Rama, Krishna, Shiva, Vishnu and Brahma. The Vedas, Ramayana, Mahabharta and Upanishads are considered as religious books. The Vedas and Puranas are read by learned pundits. Ramayana and Mahabharta are read by commoners.

The place of worship of the Hindus is called mandir or shivala. Some of the temples contain the idols of all the important gods and goddesses, whereas a few specially dedicated to the particular deity, have images of that god or goddess alone. The worship of Hanuman is usually done on Tuesdays. Sanatanists also worship sun, fire, water, air etc.

An important sect amongst the Hindus is called Arya Samaj. Arya Samaj was founded by Swami Daya Nand in 1875 and it became popular in Punjab and U.P.. The first branch of the Arya Samaj was opened in Ludhiana in 1882. Arya Samajists do not believe in idol worship and in incarnations. They hold Vedic religion to be only true religion and as such, regard the Vedas as their only religious books. The Arya Samaj also pleads for Shuddhi or the re-conversion into Hinduism of those who were converted into other religions from amongst the Hindus. The places of worship of the Arya Samajists are different from those of Sanatan Dharmis. They perform *yajna* and recite *mantras*. In Ludhiana city they have a considerable hold, running a number of institutions, wherein they also deliver religious discourses.

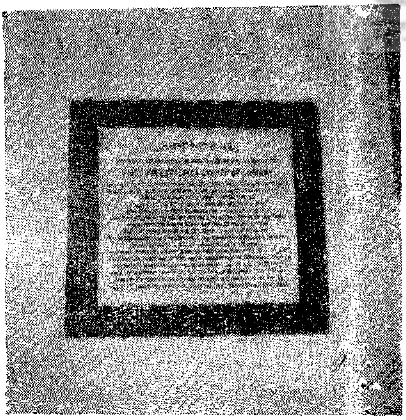
The Radhaswami sect with its headquarters at Beas is also popular amongst the town folks of Ludhiana. Their present Guru is Baba Charan Singh. This sect has also gained some footing in the district.

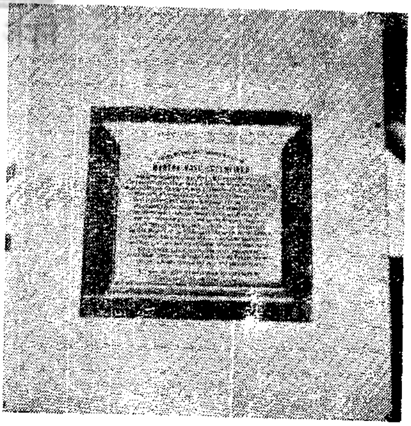
There are also a few Dev Samajis. They are atheists. Their headquarters is at Moga. Their activities are mostly confined to the moral fields. As such Dev Samajists have not attained much popularity. In all other respects the Dev Samajists are not different from the other Hindus.

Bhajans, *Kirtans*, recitation of devotional songs in praise of Rama, Krishna and some local deities, such as *devis* etc., the concept given originally by Vaishnavism, have become very popularin the towns. Different *Kirtan mandalies* formed in the towns recite *kirtans* on request and those *kirtans* are performed in the day-time. *Jagratas* are performed as marks of devotion to *devis* in the night. The *kirtans* are performed with musical instruments. *Kathas* in praise of Sat Naryana are also held in the homes and temples and generally end with the distribution of '*prasad*' (Sweets).

Superstitions and beliefs in with craft and sorcery etc., are observed by the illiterate persons, Worship of *peepal*, *tulsi* and *Banyan* trees and other animate and inanimate objects is also common among certain classes of the Hindus.

Inner View of the Church

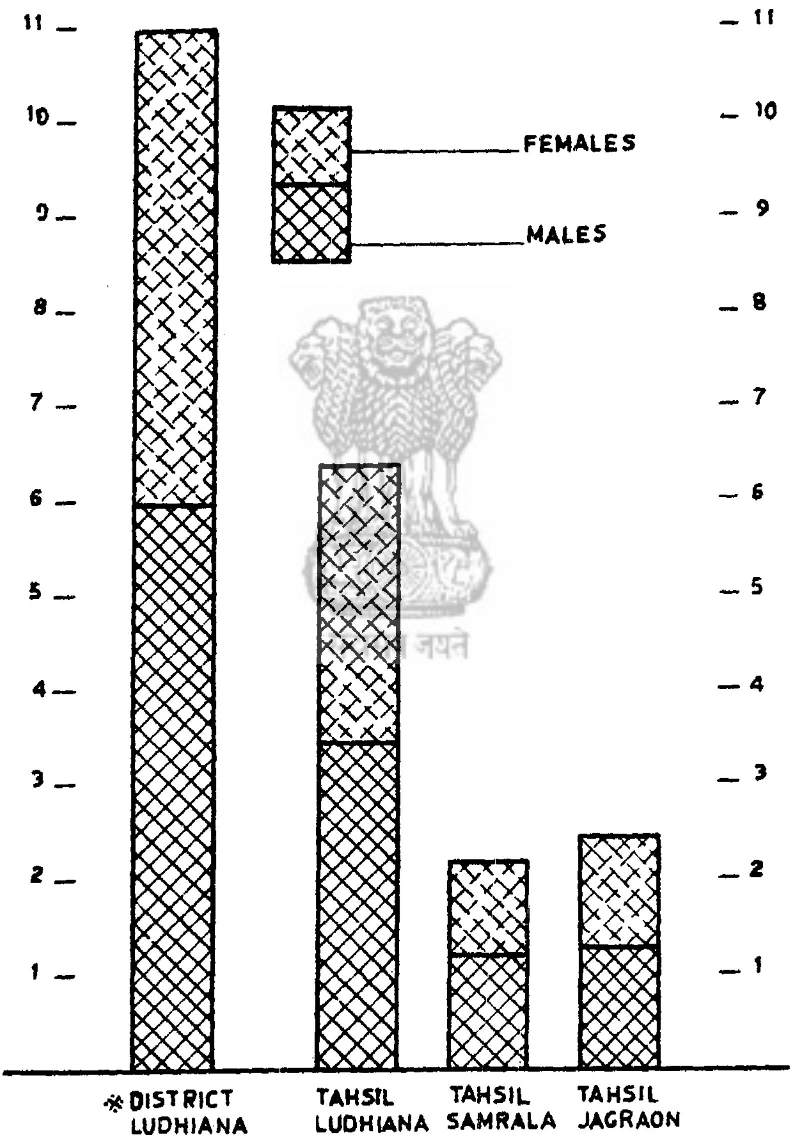




Inscriptions in the Church.

POPULATION AT A GLANCE
1961

FIGURES IN LAKH



* INCLUDED SUB TAHSIL PAYAL.

Source :- Census of 1961
or Payal D.S.O. Ludhiana (attached in 1963)

JAN.1969

The religious observances differ from family to family and caste to caste. Hindus usually go to temples, but it is not obligatory. Some of them make small temples in their own houses by installing small idols. Religion still continues to play an important role in the life of people. On certain occasions i.e., on ceremonies of *sanskaras* (sacrements) and *grah pravesh* (entering newly built or purchased house), the priest attends to the performance of the rites.

Castes.—The principal castes of the Hindus are Brahmans, Khatris, Banias, Swarankars, Suds, Rajputs, Aroras, Jats, Scheduled Castes and Backward Classes.

Brahmans.—There are ten sub-castes of Brahmans. Of these the Sarsuts, Kankubajas, Utkals and Maithals, are called Panjgaur ; and the Darbars, Tailangs, Maharastras, Gurjars and Karanataks are called Panjdarbaris. Those who live in the Punjab are chiefly Sarsut Brahmans. Sarsut Brahmans have special association with the Punjab proper since they take the name from Suraswati, which lies near the eastern boundary of Yamuna. Sarsuts are less grabbing and volatile than the Gaurs and are certainly much less rigid in the observance of caste rules, such as eating and smoking with most of the other Hindu castes like Banias, Khatris, Suds and Kayths.

Sarsut Brahmans represent a single group. Still, on account of their different families, they do not intermarry with each other. Amongst Sarsuts themselves some sections are called Baharis (i.e. twelve), who marry and give their girls in marriage to twleve castes only, and other called Bunjahis (i.e., fifty-two), who give and take the daughters of fifty-two houses only and do not give them to, or take them from, any other house. The third group of Sarsut Brahmans are called Athwans (eight families), Joshis, Kurals, Sands, Pathaks, Bharaduajis, Shoris and Tewaris. These eight families give their daughters to and take them from each other and will have nothing to do with any other families. Similarly another group comprising Datt, Bali and Mohan Lau and Chhiber, are called Mohyal. They also own lands and generally eat meat and are not very strict in the observance of religious customs. They also marry within five castes. In the changed socio-economic circumstances the rigidity of having matrimonial alliances within particular groups amongst Bahris, Bunjahis, Athwans and Mohyals has greatly diminished and they generally inter-marry now-a-days.

Brahmans are scattered all over the district. Previously their vocation was confined to teaching and performing priestly duties. Under new economic and changed social conditions they, too, have taken to trade and industry and have also started joining services in the public and private sectors. They are generally of good disposition and of gentle manners. The number of Brahmans still sticking to priestly duties is fast decreasing.

Khatris.—Khatri is a popular variant of the sanskrit word Kashtrya, which was used to describe the warrior caste among the Hindus according to the Varanashram propounded by the Shastras. In course of time as a result of economic and political exigencies, however, the Khatris also resorted to mercantile occupations, which were originally adopted by the Vaisas, the trading classes.

Like Brahmans there are further sub-divisions amongst Khatris-Banjais, Sarin, Dhaigharas, Chargharas, etc. In the reign of Alaudin Khilji widow re-marriage was enforced. Fifty-two castes of Khatris are said to have submitted a memorandum, duly signed, to the Emperor. The signatory castes are called Banjais. Certain castes of eastern Punjab refused to sign the memorandum and were called Shari-Ain, later corrupted to that of Sarin. The Khokhrain baradari is said to consist of the descendants of certain families of Khatris who were believed to have joined the Khokhars in a rebellion and with them other Khatri families were loath to have matrimonial relations. The Bahri section of the descendants of Mehr Chand, Khan Chand and Kapur Chand, three Khatris who went to Delhi in attandance upon one of Akbar's Rajput wives, and who thus separated from rest of the Khatri castes, married only within each other's families.[8] The number of the members of this caste is fairly large. The more prominent, however, in point of social rank are the Mehrotra or Mehra, Khanna, Kapur and the Seth sub-castes.

Prior to partition certain castes, such as Churamani, Nanda. Khullar, Jerath, Chopra and Vig were particularly associated with Ludhiana ; Bahl, Kapur, Mehra, Seth, Beri, Sencher and Dhir with Jagraon ; Batte, Sondhi and Karir with Machhiwara and Bahlolpur ; Sehgal and Thapar with Rai kot and Had and Cham with Khanna. After partition different castes of Khatris have been widely dispersed with the result that it is very difficult to ascertain their numbers caste-wise, especially because compilation of statistics according to castes has been discontinued since 1947.

Khatris are generally mild in disposition. They are mostly literate and law abiding.

Khatris in the district are a great commercial class. They have also made their mark in industry. In Payal sub-tahsil they are generally land-owners They also engage themselves in Government or private service.

Banias.—The word Bania is derived from the Sanskrit *Banjya* or trade ; and the Bania, as the name implies, lives solely for and by trade and commerce. Prior to partition Banias of castes Gar, Goyal, Sital, Mital, Eran, Dheran,

8. These appear to be conjectural for the same division appears among the Brahmans of western plains.

Bansal, Kosal and Oswal were generally found in the district. Thereafter the position has greatly changed and the Banias of other sub-castes have also settled in these localities.

Banias are settled every where in the district but are less numerous than khatris. They are essentially a commercial class. They occupy a prominent place in industry as well. Some of them have joined service in private and public sectors. They are very intelligent and shrewd. They are fairly well-to-do and easily distinguishable from their peculiar dress, though they are fast discarding the traditional apparel. They are presently concentrated in Ludhiana, Jagraon and Khanna. In out of the way villages where they used to be the only shopkeepers their number has rapidly decreased.

Suds.—The origin of Suds is a mystery. It is stated that they are really the same as the Raikwals of Agra and Delhi ; and they have the same sub-castes ; but surprisingly did not inter-marry. They are said to have become a separate class like the kaithas, whom they resembled in the lack of rigidity in the religious observances and liking for wine and meat. Geographically they are divided into the hill (Uchandia) and the plain (Nawandia) and specially pure (khara) and inferior (gala, chechar). The suds of hills are said to be of the latter type as they were believed to have fallen in status at some period on account of observance of widow re-marriage.

In the district they are concentrated in Ludhiana and Machhiwara. They are of gentle disposition and law-abiding.

Some decades ago, Suds had special liking for Government jobs i.e., Munshi, Patwari, Kanungoes, etc., but this liking has now disappeared. Presently they are engaged in commerce and industry. They also join services in private and public sectors. They are literate as a class and are very intelligent and shrewd.

Aroras.—Aroras claim to be of Khatri origin. Khatris, however, reject this claim. Sir George Campbell is of the opinion that the two belong to the same ethnic stock. They say that they became out-castes from Kshatriya stock during the persecution by Paras Ram (legendary Parshu Ram) to avoid which they denied their caste and described it as *aur* or another, hence their name. But it has been suggested that the Multan and Lahore Khatris are Khatris specially connected with those places : Aroras are Khatris of Aror, the ancient capital of Sind, now represented by modern Rohri (Near Sukkur in West Pakistan).

After partition very large numbers of Aroras have migrated from different districts of west Pakistan and have settled in the district. They are very active, hardworking and intelligent tradesmen. They are far shrewder than their local counter-parts, Khatri shopkeepers. They are mostly engaged in

commerce and industry. They are fully alive to the dignity of labour and do not hesitate to take up any petty job. Poorer amongst them have been running mobile shops in the villages on bicycle and make available the goods from towns on nominal profit. Gradually their economic position has become better and they have almost become settled and have given up the vendor's jobs. By sheer dint of merit and superior skill they have made their mark in business and industry. They are of good disposition and lead hardy life. They have mostly settled in towns and few of them who own land have settled in villages.

Rajputs.—The origin of Rajputs is also a mystery. Some hold them to be of scythian stock and the others believe that they are the descendants of foreign invaders, i.e., Kushans and Huns, etc. The general belief about their origin from *Agni kund* is also prevalent. Previously Rajputs and Hindu jats were engaged in agriculture and, as such, generally settled in villages. They gave their lands on *batai* and did not cultivate on their own. They have almost shifted to towns and have engaged themselves in other professions.

Scheduled Castes.— For centuries they were accorded very low status in society. With the advent of freedom constitutionally their position has completely changed. Untouchability has been made a penal offence.

Scheduled castes are also scattered throughout the district. They are generally engaged in their ancestral profession. In towns they reside in separate localities. In rural areas they generally live in the localities separated from the main habitation. Government have provided many amenities and concessions to ameliorate their lot. In Government services 19 per cent posts are reserved for them and consequently a good number of Scheduled castes are being represented in Government service.

Among themselves scheduled castes are also caste ridden. They freely use wine and meat. They are generally of submissive disposition due to their chronic economic backwardness. They have yet to enter commerce and industry. In leather and tanning trades, of course, they have already made appreciable progress. They are also well represented among industrial labour.

Jains.—Jains number 5,110 in the district.

Vardhamana Mahavir Tirthankara was the chief protagonist of Jainism. Out of 24 Arhats, beginning with Rsabha or Ursabha and including Neminatha, Parsanatha, the last is Vardhamana. The word jain or Jaina denotes a person who has given up living or thinking like ordinary men. A true Jain should entirely renounce all thoughts of self. Jains acknowledge one supreme being to whom they give the names of Jaineswara, Paramatma, Paraparavesta and several others as atrributes of infinite nature,

It is to this supreme being that all the prayers and sacrifices of the true jains are offered ; and it is to Him that all the marks of respect which they pay to their holy personage, known as *saloka-purushas*, and to other sacred objects represented by human form, are really addressed ; for these on attaining ***moksa*** (supreme blessedness) after death, have become united or incorporated with supreme being.

The jains are divided into two main groups. Digambra Jains, who roam un-clothed and Svetambra, who put on white robes. People of former sect are considered inferior and are not seen in general.

Jains have their own philosophy and metempsychosis. The Supreme being, they say, is one and indivisible, a spirit without corporal form or physical limitations. His four principal attributes are Ananta-gnanam (infinite wisdom), Anant darsanam (infinite intuition), omniscene and omnipresence, Ananta Viryam (omnipotence) and Ananata sukham (infinite blessedness).

They believe in transmigration of soul. They lay stress on external and internal denial. As in Vedanta, they do not agree with the theory of Atma Paramatma. They hold that the soul and individual does mingle with the Supreme. They are opposed to offering a devotion to any being, human or divine in the hope of gaining bliss or immortality. Jainism was perhaps the first to recognise life in plants. They lay great emphasis on Ahimsa or the doctorine of non-injury to any one (Ahimsa Parmodharma). Their conception of worship of God is impersonal. They even permit suicide to end life.

Jains are strictly vegetarians. They even abstain from taking garlic and onion. Usually they take their dinner before sunset.

Jains are a very rich class, essentially a commercial community. Unlike elsewhere in India, they do not have any temple of architectural significance in the district.

Mohammadans.– In the wake of the partition of the country overwhelming majority of mohammadan population of the district migrated to Pakistan. The number of muslims had fallen to 3,360 in 1951 as against the muslim popula-tuion of 3,02,482 in 1941. In 1961 Census their population has increased to 4,486. Out of the two sects of Sunnies and Shias, the existing population mainly comprises the former. Islam teaches theism. Literally it means submission to the will of God. It is held that the religion was revealed by God through Muhammad, His Prophet. The teachings are contained in the holy Koran and the Sunnah of the Prophet. Islam believes in the conception of hell and heaven. Dead bodies would come out on the *Roz-i-Hasher* (Day of judgement) and will be judged according to their deeds.

Every Muslim is required to say *namaz* five times a day regularly. He is also required to observe *Roza* (fast) in the month of Ramzan. Lending money on interest is forbidden in Islam.

The remaining Muslims mostly resided in big towns, especially in Ludhiana proper. Since their population had been greatly reduced and statistics are not maintained caste-wise, it is difficult to describe their number in that manner. In Malerkotla proper (Sangrur district) Muhammandans form a conspicuous majority and a good number of Muhammadans of the district belong to that place. It is believed that they represent every section and caste of Muhammadans viz., Sayyids, Sheikhs, Arains, Rajputs and *Julahas*, etc. They are also believed to represent both the denominations—Shias and Sunnies. Quite a large number of Muhammadans of the district hail from Jammu and Kashmir. They are mostly engaged in shawl weaving and embriodery work. They work as casual labour. Some of the Muhammadans do certain miscellaneous jobs as tailors, cobblers and *dhunka* (cotton-cardner), etc. With such a thin representation in the district and not having any notable and direct hand in agriculture and industry, their presence is not being significantly felt.

Sikhs.—Out of the total population of the district 6,44,266 are Sikhs. They pay respect to their ten Gurus and their holy book is *Adi Granth* i.e., the *Granth Sahib.*

Sikhism has an uncompromising belief in monotheism. The monotheism of Sikhism is different from that of Islam. Sikhism holds God as omnipresent and does not have a particular place for him to reside. As such, the conception of God in Sikhism is more pantheistic than anthropomorphic.[9]

Of God it has no form or substance. It does not believe in idol worship. It lays great emphasis on recitation of '*nam*'—the constant repetition of any of the names of God. It also believes in immortality of soul and its transmigration. It pleads for meditation of God through *nam* under the guidance of a Guru. It does not believe in casteism, at best in theory.

A Sikh is required to receive *pahul,* a sacred ceremony like the sacred thread among Hindus. He is not to smoke and take *alcohol.* Sikhism inculcats moral and domestic virtues. It is essentially a religion of householders. It does not require a man to renounce the world or to become an ascetic in pursuit

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9. "We can distinguish in the Granth", says Trumpp in the Transation of the Adi Granth, "a grosser and finer kind of Pantheism. The grosser pantheism identifies all things with the Absolute, the universe in its various forms being considered the expansion of it; the finer Pantheism, on the other hand, distinguishes between the absolute and the finite being and oorders frequently on Theism. Though God is producing all things out of Himself and is filling all, yet he remains distinct from the creatures and is not contaminated by the *Maya*, as lotus in a pond of water remains distinct from the water surrounding it."

of God. The Gurus set an example in this regard and served as models for the followers. Sikhs are required to observe five 'Ks'.[10] They generally take meat by killing the bird or animal with one jerk of sword and call it *jhatka*. The cow is sacred to them.

The place of worship of Sikhs and the centre of theii community life is called the Gurudwara, wherein the *Adi* Granth is generally kept for devotional study or recitation. The holy book is kept with reverence. *Dasam Granth* (the work of the 10th Guru) is also considered a holy book ; but it is not kept in the Gurdwara. Five Gurdwaras: Amritsar, Anandpur, Patna, Nander and Damdama Sahib are called *takhats* or the holiest places.

By and large Sikhs are tall and sturdy with long hair carefully kept and long beards. They never go out without a turban ; any other headgear being strictly forbidden to them. In eating and drinking they closely resemble the Hindus, though they are generally meat-eaters.

In the course of time, several sects sprang up among Sikhs and disappeared. Only Nihangs, Namdharis, Udasis and Nirankaries still exist. Of these, Namdharis deserve special mention in the district.

Sikh population comprises Khatri Sikhs, Arora Sikhs, Sikh Jats and Mazhabi Sikhs.

Khatri Sikhs.—Khatri Sikhs are generally of the same sub-castes as Hindu Khatris. It is well known that any Hindu could seek conversion to Sikhism without losing his original caste. In principle,Sikhism does not recognise caste ; but in practice it is observed amongst Khatri Sikhs as in the case of Hindu Khatris. Khatri Sikhs have generally settled in the Doaba and Manjha. They have recently migrated from the urban areas of West Punjab and have settled in Ludhiana. They are generally engaged in commerce and industry. A few of them also own land but they do not cultivate it themselves and get it done on *batai*. Being literate they have also taken up service in the private and public sectors. Khatri Sikhs, like Hindu Khatris, are also divided into Baujahi, Sarin, Dhaigharas, known as Bahri, etc. Their origin is also not different from that of the Hindu Khatris.

Arora Sikhs.—Arora Sikhs have mostly settled in urban areas. After partition some Arora Sikhs from Sargodha, Rawalpindi, Jhelum, Gujranwala and Lyallpur districts have also settled in this district.

They are not different from Hindu Aroras. Any Hindu Arora after conversion to Sikhism becomes Arora Sikh and retains the sub-castes like his

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10. *Kachha* (short pant), *Kara* (iron bangle), *Kirpan* (sword), *Kangha* (comb) and *Kes* (long hair).

Hindu counter parts. Till recently there was a custom amongst Hindu Arora families in West Punjab that they used to keep long hair of their first male child and name him as Sikh. Quite a few arora families in the district still have the eldest son as a Sikh while the rest are Hindus. Some Arora Sikhs from Sargodha district also own land; but they usually do not cultivate and instead give it on *batai*.

Like their Hindu counterparts they are well-built, hardworking, enterprising and intelligent. Generally they are engaged in trade, commerce and industry. Some of them have also taken up service in private and public sectors. They are, however, very successful in business. Even those who had migrated here from West Punjab with slender resources have, by dint of their own labour, rapidly rehabilitated themselves and can hold their own against well-established local parties.

Notable amongst Sikhs in the district are Jats. They are well-built, sturdy, energetic and hardworking. They are virtually the lords of the soil. They also have entered services in the private and public sectors. Their representation in the Defence Services is fairly high. The British were appreciative of fine qualities of the Malwa Jats and called them the best peasantry in India. They undoubtedly preferred them to the Manjha and the Doaba Jats. The tribute is probably due to the faithfulness of Malwa Jats and their Chiefs during the Anglo-Sikh Wars and also on account of the intention of the Britishers to use the Malwa Jats as a counterpoise against the Manjha and the Doaba Jats. The fact, however, remains that Manjha and Doaba Jats are in no way second to the Malwa Jats. All the exploits and deeds of valour of the Khalsa in the time of Misls and Maharaja Ranjit Singh were attributable to the people of the Manjha and the Doaba, including the Jats. In recent times also, this stands corroborated as the Manjha and the Doaba Jats enjoy equal status in every sphere. The Manjha and Doaba Jats settling in the district after partition have proved their worth and have been found to be equally skilful and successful in the field of agriculture as well.

The statistics about the different *gots* of Jats (as they do not believe in castes) who have settled in the district from Sargodha, Jhelum, Gujranwala and Lyallpur districts under the rehabilitation programme of the State Government, are not available. It is presumed that Jats of almost all the notable *gots* of Manjha and Doaba Jats previously settled in *bars* and canal colonies have migrated and settled in the district.

The principal *gots* among Malwa Jats in the district are Grewals, Gills, Dhariwals, Sandhus, Sekhon and Dhillon. Almost all the Jats trace their origin from the Rajputs. This identity is perhaps due to the fact that prior to the rise of Jats, Rajputs enjoyed superior status and prestige in the Punjab.

Different theories have been advanced about the origin of the Jats. The consensus appears to be in favour of the view that they are from the Scythian stock. Anyhow the points need further research. The origin of different *gots* of the district, however, may be given according to commonest traditions prevalent in the area.

Garewals or Grewals.—One of the notable *gots* in the district are Garewals or Grewals. They trace their descent to a Rajput Raja Rikh, who came from the South and settled in Kahlur (Bilaspur in Himachal Pradesh) in the hills. Bairsi, son of Rikh, left Kahlur for Naiebad Theh to the South of Ludhiana, and contracted a marriage with a Jat woman named Rup Kaur and had to start his *got* himself as his brothers would have nothing further to do with him. His son was Gare whence the name of *got*. It is also said that the son was named Gare as he was born at Gare (*kup* of husk). Another fanciful origin is Krewal from Krewa. The former origin appears to be more plausible as the *got* was spelt Garewal till very recently and its spellings stand changed to that of Grewal in every recent times.

The descendants of Bairsi gradually spread over the country to the south-west of Ludhiana. The Garewals were admitted by the other *gots* to be superior and were called Sahu-log, i.e., superior. The Garewal families of Raipur, Gujarwal and Narangwal enjoyed a sort of local authority till the close of the last century. They used to take up public service, especially in the army. Even now their representation in the Defence Services and Civil administration is fairly good.

सत्यमेव जयते

Gils.—Gils own about forty villages, mostly in Jagraon tahsil. They claim their descent from Surajbansi Rajputs, their ancestor being a king of Gharmela in the south, whose son, Akaura, took to agriculture. The son of Akaura, Gill, founded the *Got* which moved northwards by degrees. It is said that they came to this district about 310 to 370 years ago, in the reign of Shah Jahan. Gils are first rate agriculturists but their habits are generally extravagant.

Sidhus.—The Sidhus have a good many villages in Jagraon tahsil and three Sidhwans. They are a well known *got* in Manjha as well. Those of the Ludhiana district are of Brar sub-division ; and came from the south west from Faridkot in the times of Rais about 260 to 360 years ago. They also trace their origin from Rajputs of Jaisalmer (Rajasthan).

Dhariwals.—Dhariwals have a good many villages lying about Pakhowal and are mostly found in the Jagraon tahsil. Their ancestor was, as usual, a Rajput, who came from Jaisalmer and settled in Kangar in Nabha territory, becoming a Jat. From Kangar his descendants came into this district under the

Rais and their Sikh successors. They are considered to be one of the superior *gots* of Jats, ;but do not differ much in their customs from the others.

Bhandhers.—Bhanders are stated to be descendants of Bhander,who was the off-spring of the union of a Rajput and woman of inferior caste. He settled in Bhatinda first and thence his decendants migrated to Malaudh where the *got* now holds a few villages.

Sekhons and Dhillons are stated to have come from Patiala territory (Pawad) and Amritsar District (Manjha). Dhillons were believed to have come in the reign of Emperor Muhammad Shah. Besides, there were other *gots*-Mans, Sindhus, Mangats and Cheemas, numerically less in number, settled in the district.

Ramgarhias.—Ramgarhia is not a caste of carpenters, as is popularly believed. They have derived this denomination from the name of the Misl. This Misl had its jurisdiction between Amritsar and Lahore (around modern Barki now falling in Lahore district, West Pakistan). Before independence, Ramgarhias were mostly engaged in cultivation, and small scale industry. They have a technical bent of mind. After partition they greately progressed in the field of industry and have emerged a very well-to-do class, though socially they still appear to be not so much advanced. They have mostly settled in Ludhiana proper. They have a considerable hold on the iron and steel industry in the district.

Namdharis.—Namdharis, popularly called Kukas, a cohesive group among Sikhs, are distinguishable by white home-spun dress and flat turban (Sidhi pag). This movement was originally started in Hazro (Pakistan) by Bhagat Jawahar Mal and Baba Balak Singh.

Namdharis trace their origin to Guru Nanak. The faith up to Guru Gobind Singh, as accepted by the Namdharis and the other Sikhs, is the same. After Guru Gobind Singh the Namdharis believe in the continuity of the living Gurus whereas the other Sikhs believe that Guruship was vested in *Granth Sahib.* Though the *Granth Sahib* is being respected by the Namdharis but they claim that according to Sikh scriptures, and the true Sikh history, Guruship cannot be vested in a thing which has no life. According to Namdhari belief, Guru Balak Singh is the 11th Guru and Ram Singh is the 12th Guru in the line of succession.

The movement in the district was given a fresh start by Baba Ram Singh. Under his dynamic leadership the movement soon assumed a political tinge with Bhaini Sahib as its headquarters. Baba Ram Singh was deeply conscious of the rapid moral deterioration of the Sikhs in regard to the observance of traditional practices and also by loose living—prevalent among the Sikhs under the British. In a very short time Sikhs rallied around him and became his devoted

followers. They considered him a descendant of Guru Gobind Singh. On his deportation to Burma on political grounds, he was succeded by Baba Hari Singh and then by Partap Singh. The living Guru is Baba Jagjit Singh.

Namdharis are strictly vegetarian. They wear home spun and put on a rosary of woollen thread around their neck. They hold cow as sacred. Kukas believe in casteism. They hold that *Roti* (bread) and *Beti* (daughter) should be accepted within the caste group. They do not eat cooked food with non-Namdharis. Before independence they also took active part in freedom movement. The headquarters of the Kukas have recently been shifted to Jeewan Nagar (Sirsa) in Haryana. Bhaini Sahib and Jeewan Nagar enjoy the same status.

Namdharis have settled throughout the district. Shri Bhaini Sahib is the headquarters of this sect. They are mostly engaged in agriculture and trade. They are popularly known as 'Kukas' and can be recognised from their dress as they tie their turban in a peculiar style (*sidhi pag*). They are very puritanical in their habits and strictly observe the injunctions of their Guru. They have mostly shifted to Mandi (Himachal Pradesh) and Jeewan Nagar (Sirsa Sub-Division of Haryana).

Mazahabi Sikhs.—The Scheduled Castes converted as Sikhs are called Mazhabi Sikhs. They are engaged in petty jobs. They do not, however, carry nightsoil. It is said that the dead body of Guru Teg Bahadur, 9th Sikh Guru, was brought by a Mazhabi from Delhi and the members of the caste were accepted into Sikhism. Hence, the saying, '*Rengreta Guru ka Beta*'. In practice, however, they do not enjoy the status enjoyed by the Khatri, Arora and Jat Sikhs. They do not associate with them in marriages, etc. In the Gurdwara and in *langar*, however, they are treated alike.

Miscellaneous Castes.—Banjaras and Labanas : Banjaras and Labanas reside in the *bet* area. They claim the same origin as others, as a matter of course. They are, however, a distinct caste. Banjaras assumed to be somewhat superior to Labanas ; but in the district they intermarry. They are both Hindus and Sikhs by religion. Besides agriculture, they are also engaged in petty trade and labour, i.e., transporting grains, etc., on bullocks ; and the Labanas in making ropes, brushes, etc., from *Munj* (beaten weeds).

Labanas are all Sikhs. They also reside exclusively in *bet* where they own some villages. They are said to be a branch of the Chauband Rajputs. The important *gots* among them are Dagnamat, Udiana, Sukiana, Majrawat, Bartia, Balthia and Barnawat. They practise *krewa* and worship Gugga Pir.

Carpenters.—Like other village artisans, carpenters formed an integral and important part of the agricultural economy. They used to serve the rural community in exchange for specified share of the seasonal crops. As a result of rapid urbanisation of Ludhiana and other towns, the carpenters were greatly

in demand there for the manufacture of fashionable articles of furniture and sundry wood work connected with fast growing construction of new houses. In the course of time they became economically well off due to cash payment of their wages. Village carpenters are no match to their urban counterparts in the economic field. A good number of them, as stated elsewhere, have adopted new trades and industries and have been quite well off.

Lohars (Blacksmiths).—Lohars are also village artisans who do all the smithy work for the agriculturists. In the urban areas previously almost all the lohars were Muslims. After partition petty jobs are being performed by both Hindus and Sikhs. Items of note are manufactured by foundries in Ludhiana and in other important towns like Khanna and Jagraon.

Jhiwars or ***Kahars*** (water carriers) are not necessary in most of the villages, for the Jat women mostly fetch water of their own, where necessary. They are also not found in towns as in all the towns of the district water is in abundance and water supply is regular. In marriages, however, even now, the presence of a Jhiwar is a must for fetching water and cleaning the utensils. In the changed circumstances the Jhiwars have suitably adjusted themselves. They have started petty hotels and restaurants and also enjoy monopoly in establishments selling parched grams, maize, groundnuts and sugar coated parched grams, etc.

They have also sought employment in big hotels as cooks, *tandurias* and other miscellaneous and petty jobs.

Nai--Nai (barber) is found everywhere and is a very important village servant. Previously he was invariably employed, at the time of need, in arranging betrothals and deciding about dates of marriages, etc. Now their services are confined to conveying messages of marriages and deaths, etc., amongst relations and acquaintances of the concerned family in very rare cases.

Younger lot of barbers are settling in urban areas where the running of saloons is a very paying business. Many of them are also joining services in the public and private sectors. Only the aged persons are clinging to their ancestral professions. In the near future these functions of *lagi* or go-between will be performed by few as the nature of job is quite unattractive and less paying.

Jullahas (weavers).---By the end of last century *Julahas* were widely scattered throughout the district. In Ludhiana proper there was a large colony of weavers. With the popularity of mill-made cloth and also with its availability at competitive rates, the weaving of cloth by *Julahas* has become unremunerative. They are, however, still engaged in the weaving of *durries* and *khes*, etc. In the villages a few are still engaged in weaving course cloth for use by the local population.

This profession has also undergone good deal of change. Blankets, mufflers and shawls are in great demand. This work is not necessarily being done by the *Julahas*, but instead by the local industrial labour engaged in woollen hosiery, who do not accept the nomenclature of *Julahas*.

Besides, brickmakers, *mochis* (leather workers), *dhobis* and *chhimbas* (cloth stampers) reside mostly in towns. The work previously done by *dhobis* has been further sub-divided. Dry cleaning of woollen and silken garments is performed by dry-cleaners—not necessarily by *dhobis*. Since the rates of washing cotton clothes have gone abnormally high, people wash them on their own and get them ironed from itinerant *dhobis*, as this arrangement also enables them to carry on even with less number of clothes.

Brickmakers are employed in *bhattas* (brick kilns) and mostly this labour is imported from Rajasthan and U.P. One rarely comes across any local man from the district engaged in this profession. A reference to *mochis* has already been made elsewhere under caption Scheduled Castes.

(e) **Social Life.**—With the phenomenal advancement of education and medical facilities under the new national set-up in the country, the superstitions amongst the people are gradually fading away. It would, however, be rash to assume that the people have developed a scientific temper ; but slowly and steadily social barriers are being removed. With the passage of the Untouchability (Offences) Act, 1955 , and recognition of equality under the Constitution, the status of Scheduled Castes has considerably improved.

After independence the old practice of observing *purdah* has practically disappeared amongst the Hindu and Sikh women in urban areas. The Muslim ladies, however, still observe it. In rural areas the orthodox Hindu and Sikh women still cling to *purdah* in a very restricted form ; but it is also expected to disappear with the rapid awakening and advancement of education.

Casteism in a milder form still persists. Even Sikhs and Muslims are not free from caste distinctions. Sikhs of higher groups, i.e., Khatris, Aroras and Jats, etc., call themselves Sardars whereas Scheduled Castes Sikhs are called Mazahbi. Among the Muslims, Sayyeds and Sheikhs consider themselves superior to the Rajput converts and, similarly, the Rajput converts claim a higher social status than *kumhars*, *arains*, *telis* and *dhunkas* (cotton carders), etc. Undoubtedly scorn for lower castes/groups has been considerably lessened, but still people do not freely mix up on social occasions. They, however, do not mind such free gatherings in hotels, restaurants and cinemas, etc.

It need hardly be gainsaid that modern civilisation, typified by western education, increased communication facilities and commercial and employment avenues outside one's home, has brought about a radical change in the

joint-family system—a cultural heritage in India. The age-old system has not yet been completely shattered ; but has undergone a radical change. The persons coming to the towns from villages still retain some connection with their ancestral places. They revert to their parental homes for the performance of important social and religious ceremonies. In certain cases members help the relatives financially at the time of need, viz., marriages, construction of houses, etc. People of urban areas settled elsewhere also act in the same manner. Joint-family system may, therefore, be said to exist as Joint Welfare System. Persons might separate at an advanced stage when they themselves have a big family. This type of change under the new pattern of industrialisation and urbanisation was inevitable.

Inheritance among the Hindus was governed by Hindu law. The eldest son succeeded as the head of the family ; but the brothers had equal shares. Daughters did not claim anything from their father's property. Sikhs were governed by customary law. "*Page Wand*" and "*Chunda Wand*" systems were practised according to the custom. In the case of rank, viz., *lambardari*, the rule of primogeniture prevailed. Now Hindu Succession Act, 1956, governs the inheritance of the Hindus, Sikhs, Budhists and Jains. In accordance with the Act, the property of the deceased is distributed amongst sons, daughters, widow and mother. Hindu Adoption and Maintenance Act, 1956, governs the adoption of the children and gives maintenance allowance to the wife.

Muslims are governed under Shariat Act, 1937. Under Islamic Law, the son, daughters, wife and mother, inherit the property of the deceased. Wife is the sole owner of *mehr* given to her at the time of marriage.

Inheritance among Christians is governed under the Indian Succession Act, 1925.

Marriages and Morals.—Marriages amongst the Hindus, Sikhs, Muslims, Jains and Christians are performed according to the customary ceremonies of their respective communities. Civil marriages are performed under the Indian Civil Marriage Act, 1954. Civil marriages are performed to avoid social taboos and ostensibly to save the heavy costs involved in traditional marriages.

Marriage among the Hindus.—Manu classified eight forms of marriages ; Brahma, Daiva, Arsa, Prajapatya, Asura, Gandharva, Paksasa and Paisaca. Out of these the first four forms were classified as good. Among the Hindus marriage is enjoined as a religious obligation because a father is believed to achieve salvation only through a son.

Usually the marriage is arranged by the parents. In certain educated families parents have become liberal to the extent of permitting the boy and girl to see each other. The parents of the girl approach the parents of the boy

either directly or through a mediator. In urban areas amongst educated classes matrimonial alliances are contracted through advertisements as well. The use of the services of *nai* as mediator has become obsolete. After preliminary inquiries about the required particulars the parties agree to effect matrimonial alliance. After consulting the priest the date is fixed for engagement. The father of the girl offers money and sweets to the boy, who is also given seven dry dates out of which he is to eat one. After this ceremony, generally after consultation of the horoscope of the boy, the date for marriage is fixed by the priest. A day earlier the ceremony of *ghori* is performed. The bridegroom rides on a *ghori* (mare) and makes round of the locality. Among certain castes this ceremony is not performed. After this, the bridegroom instead of returning home stays either in a temple/*dharamshala* or with some friend. The next day the marriage party proceeds to the bride's house with pomp and show. In recent years *bhangra* dance by friends of the groom has become a new feature of the marriage procession. At the bride's place the marriage party is served with a feast. In the night the ceremony of *lawan phere* is performed before the sacred fire under the *Bedi* before the priest and in the presence of relations and responsible persons of both the parties. Next day the party returns with the bride and dowry, including gifts. In the bridegroom's house certain ceremonies, i.e., taking the couple to temple, etc., are also performed. Ordinarily after staying for a day or so the bride returns to her parents' house.

The marriages of *spinda*[11] relatives is not permissible among the Hindus. Hindu Marriage Act, 1955, bars marriage within five generations on the agnatic side and three on the mother's side. It, however, permits the marriage of cross cousin, if this is customary. This *spinda* bar equally applies to the Sikhs, Jains and Buddhists.

The Sikhs.—Marriages amongst Sikhs were performed according to Hindu rites prior to 1909. With the passage of Anand Marriage Act, 1909, the marriages are generally performed by Anand Akaraj.

The marriage system of Sikhs closely resembles that of the Hindus. The notable difference is that *lawan* (*phere*) are performed around the *Adi Granth*, which is always on the spot. Some texts from the *Adi Granth* are recited. The couple is supposed to have received *pahul* before *lawan*. This condition is sometimes relaxed and the couple may be advised to receive *pahul* at some later stage after marriage, if not already done.

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11. The term *Spinda* has two meanings

(i) those who share the particles of the same body ; and

(ii) those who are united by offering balls of cooked rice (Pinda) to the same dead ancestors.

Marriage rites under *anand karaj* are cheap and simple. Unlike the Hindus the services of Brahmans are not required ; but instead the Granthi (religious preacher) performs the duties. Dowry system, as amongst the Hindus, is also prevalent.

The Namdharis.—The marriage system among the Namdharis is the simplest and the cheapest. It was introduced in 1863 by Baba Ram Singh. Earlier marriages were solemnised according to the Hindu system, which involved a lot of time, money and cumbersome ceremonies. All these were reduced to the making of four rounds of a sacrificial fire (*hawan*).

The would-be union by marriage is determined by parents, but the blessed approval of the Guru is most essential. The boy should not be under 18 and the girl under 14. A Namdhari girl is generally married to a Namdhari. No dowry is allowed. Expensive and showy customs have been done away with.

After the bath the couple attends the congregation, where the Guru is present to grace the ceremony round the sacred fire. After baptism their handkerchiefs are knotted together. The *lawan* from the *Granth* are read as they make four rounds, the bridegroom always leading. Five *shalokas* (stanzas of the Anand Sahit—hymns of bliss) are also chanted. The *Bhog* ceremony follows. The distribution of *prasad* completes the wedding. From there the girl goes to her new home and returns after a fortnight. Total expenses of marriage do not exceed about Rs 13.

Muhammadans.—Marriage among the Muhammadans is called *nikah*. Muhammadan marriage is a mutual contract agreed upon by the man and woman and certain prescribed rituals are performed at the time of the ceremony.

The marriage among Muhammadans is arranged by the parents of the boy and girl either by direct negotiations or through some mediator. The initiative is taken by groom's parents. The amount of the *Mehr* by the bridegroom to the bride is settled. *Mangni* (betrothal) takes place and on the appointed day of marriage the marriage party goes to the bride's house. With the usual feast the *nikah* takes place. The bride's *vakil* (agent) obtains her consent in the presence of two witnesses and conveys it to the groom. The Mullah or his Deputy obtains the consent of the bridegroom and sanctifies the *nikah* (confirms the marriage).

Among the Shias the consent of bridegroom is obtained first. The *vakils* of the bride and the bridegroom stand before each other and one asks the other if the consent has been obtained.

Christians.—Marriage among Christians is performed in the Church and the priest performs the marriage ceremonies. Before the marriage ceremony,

he baptises the bride and bridegroom. If a Christian wants to marry a girl of some other faith she must accept Christianity and *vice-versa*. After the ceremonies, the friends and relations are served with a feast. There is not much difference in rituals among the Roman Catholics and the Protestants.

Jains.—The Jains have the same system of marriage as the Hindus. The notable difference is that marriage ceremonies are performed by their own priest instead of the Brahmin.

Civil Marriage.—From 1950 to 1966 there have been 34 civil marriages in the district. The institution of civil marriage has not become popular. The Hindu and Sikh population being caste and *got* ridden and usually accustomed to arranged marriages have not reconciled with the new system. Even the advancement of education has failed to make the new mode popular. Generally inter-caste/inter-community marriages agreed upon without the consent or blessings of their elder members of families are performed under the Special Marriage Act, 1954[12].

Divorce. Among different communities the marriages could be dissolved either by custom or by law. Before the passing of the Hindu Marriage Act, 1955, some castes allowed separation almost like a divorce since the women were allowed to re-marry.

Since 1955 there have been 65 cases of divorce. In most cases decrees were awarded where the wife did not comply with the decree of restitution of conjugal rights for a period of two years or onward from the date of that decree. The incidence of divorce in Ludhiana is higher than in any other district of the State.

Widow Re-marriage.—Widow re-marriage among the Hindus is not common. People marrying widows are considered to be of inferior status. Despite best efforts made by the Arya Samaj in the field there has been no perceptible progress. Among the Scheduled Castes widow re-marriage is performed not according to custom but as an economic necessity. Amongst the Sikh Jats widows are re-married to their *dewar* or *jeth*. Namdharis also preach widow re-marriage. Widow re-marriage among Jains is also not popular. Christians and Muslims, however, re-marry widows.

Birth and Death Ceremonies. Religious ceremonies start among (the orthodox) Hindus before the birth of a child. The expectant mother is served with gifts (*reet*) by her relations. The birth of a son is announced by the *dai*

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12. The Special Marriage Act of 1872 also legalised marriages between members of different castes on condition that the partners renounced their religion and membership of joint families.

by tying a branch of *sirin* tree and an iron ring (not essential) to the main gate of the house. The father (maternal grand-father in case of delivery at woman's father's house) goes to the priest or *prohit* and enquires if the time of birth is auspicious. If it is not, the propitiatory ceremonies, to feed the Brahmins, etc., are observed. If the child is declared as *gand mool* (born under the bad influence of stars) the necessary remedies (*Upai*) are observed by the parents of the child. For a period of 40 days the mother does not mix up with people as this period is called *sutak*. The other ceremony of the male child is *mundan sanskar*, which is performed during the first five years. This ceremony is not performed on the birth of a female child.

The Sikhs do not consult priests on birth of a child. They name the child by opening the *Adi Granth* at random and after the first letter of the writing on the page. Jat Sikhs generally do not observe forty days seclusion (*shilla*) unless required for special reasons. Some of the Sikhs perform *kesi dahi* ceremony by putting curd in the hair of boy—a ceremony corresponding to *mundan* among the Hindus.

When a child is born in a Muslim family, the Qazi or the Mullah comes on the first to third day and recites the *kalma* (holy words) in the child's ear, and the child receives the name from the priest or from some respectable relative.

After birth of child the mother confines only for three days and thereafter she sees the sky and stars in the evening with the child in her lap. The period of impurity is ended by fast (*Iqiqa*).

Circumcision (*sunat*) is a ceremony of importance. It is performed at any time before the age of twelve in the presence of the *Baradari*. A child who is born circumcised is called *rasulia*.

A child born in a Christian family is christened by the priest. This ceremony is called baptism. The Christians also rejoice at the birth of the son ; but they do not dislike the birth of a daughter. The mother does not observe the period of impurity of forty days.

In case of death among the Hindus, the dead body is bathed and wrapped in a cloth. The body is put on bier and carried to cremation ground with recitation of *mantras*. The bier is put on pyre and put to fire by sprinkling *samagri* and ghee. On the third day a few persons go to collect the *phul* (the ashes). Those are broken into pieces and are immersed into the Ganges at Hardwar (U.P.) in the presence of a priest. Similar custom prevails amongst the Sikhs with the only difference that the ceremonies among the Sikhs are performed by a Granthi or any learned man. They immerse the ashes into the rivers of Punjab and some at Kiratpur in Ropar district.

Hindus mourn their dead for thirteen days. This mourning ends by feeding the Brahmans. Sikhs end the mourning with *Bhog Path*.

The Muhammadans, after bathing the dead body and wrapping it into white cloth, take the bier to the mosque. The Mullah reads the *Kalma* and then the dead body is buried in the graveyard. A stone slab is sometimes placed on the grave and every man attending the funeral covers the grave with earth. The Mullah prays for the dead for three days.

Like the Hindus, the Jains also cremate the dead body. The only difference is that the Jains do not mourn the dead, but instead forget all about it immediately after the death.

The Christians also bury their dead in a cemetry in a coffin. An epitaph is sometimes fixed on the grave indicating the particulars about the dead.

Home Life:

Types of dwellings.—The over-riding considerations of safety and security have been mainly responsible for the planning of the villages and towns in the Punjab. Wherever there was fear of raids and attacks, people concentrated in a small place of safety causing overcrowding. Fortification walls around towns and big villages were erected.

Types of dwellings in the district in urban areas differs from the dwellings of other districts. Ludhiana proper is a very crowded city. The areas of the houses are surprisingly small. There are 8202[13] houses per square mile in Ludhiana proper. The situation is quite alarming in Raikot. In the 19th century, extension of Ludhiana beyond Budha Nala was not possible due to floods. On the western side the English had established the Cantonment, their offices and residences. In the southern side the Presbyterian Missionaries had built their establishments. The town thus continued developing by reducing the sizes of the houses. Similarly Raikot continued developing inside the old fortification walls with the result that the total area of ·34 square mile has alarming figures of population of 11,239[14], which made Raikot the densest town in the district. In rural areas as well, the idea of safety in a particular area considerably affected the sizes and shapes of the dwellings.

The houses in Ludhiana and Raikot are very small, having generally 2-3 rooms. During the last two decades Ludhiana developed on all sides and the newly built houses are beautiful, airy and commodious. New construc-

13. *Census of India* 1961, Vol. XIII, *Punjab*, Part IV-A. p. 11.

14. *Census of India* 1961, *Punjab*, *Ludhiana District*, p. 29.

tion is generally planned. But the corollary of industrialisation, slums, are alarming. Obviously, the slums are unplanned and poorly built. Improvement Trust (constituted very late) is devising ways and means to remove the slums. The conditions in Khanna and Jagraon, however, are not bad. Newly built localities every where fulfil all the requirements of good living. There are some popular superstitions regarding the purchase of a house. A house broad from outside and narrow within is called *sher muhan* and considered unlucky. A house narrow outwardly but commodious within is called *gow mukha* and considered lucky.

In rural areas the houses of villagers consist of 2-3 rooms. In the villages of Ludhiana tahsil generally the houses are planned and pucca with separate rooms for cattle. In Jagraon tahsil the houses are very open having spacious sheds for cattle. In Samrala tahsil the construction is haphazard, the sizes of houses are small and in some cases built partially *kacha*. There is generally no provision for latrines and bath-rooms in rural houses throughout the district. Rural areas are also generally devoid of hygienic facilities. In some houses only one room is constructed pacca and is called the *baithak*. The dwellings of scheduled castes throughout the district are deplorable. They are being induced to construct new houses and for this necessary facilities are also being provided by the Government. The houses in rural areas are being electrified increasingly.

The average population of a house in an urban area is about 6. It is about 5 in rural areas. Ludhiana municipality, one of the richest in the State, is endeavouring to make the city beautiful. Vegetable and fruit markets have already been built. Grain market is similarly being built. Even the Bus Stand has been shifted to a suitable locality. These changes will considerably ease congestion.

There are 1,76,418 dwellings in the district. Out of these 1,17,968 are in the rural and 58,450 in the urban area. Out of 58,450 urban dwellings in the district, 45,932 are in Ludhiana proper. There are in addition to this 915 shop-cum-dwellings in rural areas, 296 workshop-cum-dwellings in rural area and 505 in urban area. The tahsilwise break-up of the dwellings is as under :

Name of tahsil		Number of dwellings	Shop-cum-dwellings	Workshop-cum-dwellings
Jagraon	Total	40,434	416	125
	Rural	33,334	376	87
	Urban	7,100	40	38

Name of tahsil		Number of dwellings	Shop-cum-dwellings	Workshop cum-dwellings
Ludhiana	Total	99,096	844	621
	Rural	53,164	319	187
	Urban	45,932	525	434
Samrala	Total	36,888	298	55
	Rural	31,470	220	22
	Urban	5,418	78	33

(*Source*: *Census of India*, 1961 Vol. XIII, *Punjab*, Part IV-B)

Furniture and Decoration.—Furniture and decoration in the villages of the district are not different from those in the areas falling under the central districts of Punjab. The average house has charpoys (stringed bedstead), *peehri, panghura, muhras, Bara muhra* (identical with armed chair) and sometimes a small table and chair. A wooden plank is some times fixed parallel to the wall on pegs and decorated with brass utensils, crockery pieces, etc. The village folks are ignorant of internal decoration. Still to give the house a colourful touch they instal some calendars and large sized coloured prints of gods, goddesses or some national leader or film actress. They also, sometimes, paint pictures on walls in gaudy colours. They plaster the *kacha* floor of the room with cow-dung as and when necessary. Economically better persons have *niwari* charpoys (bed-stead) which they fix in the corner of room. They paint their houses from outside as well as inside. The houses of landlords contain all the modern furniture and decorations, They have chairs, tables, sofas, radio-sets, transistors, wardrobes and decoration pieces, etc.

The utensils used commonly by the villagers are *tauri* (earthen) *degchi, katori*, tumblers, pitchers, *valtohi* (brass storage utensil).

In urban areas, generally two chairs and a table are kept in a house. They also generally keep cheap pieces of crockery. Internal decoration is not very common and calendars of gods and goddesses, national leaders and actresses are mostly displayed. Framed pictures of gods and goddesses are also hung against the walls. Sometimes, cheap curtains are also fixed. Sofas and *Plang* (superior charpoy) are rarely seen. The utensils used by them are more or less the same. Radios are generally seen in urban houses.

Houses of well-to-do persons in the urban areas have modern furniture,. The houses are duly curtained, decorated with artifacts. They have refrigerators, radio-sets, transistors, ward-robes, drawing-rooms and bed-rooms. Some decoration plants are also kept within and outside the houses. They use superior crockery, stainless steel utensils, pressure cookers and sundry modern

electric gadgets. In the *kothis* (bungalows) small gardens and lawns are also laid out.

Persons living in slums in Ludhiana are the worst hit. They might be economically better than the ordinary villager, but terrible shortage of accommodation debars them from adding to their comforts. To decorate the houses according to any acceptable aesthetic standards is something foreign to them. They have accommodation hardly to sleep therein. They have to do every thing in the single room. The single, small and sometimes dingy room is their kitchen, dining, bath, drawing-room and bed-room.

Dress and Ornaments.—Dress and Ornaments of the people are generally conditioned by tradition and new trends in vogue among the higher classes. During the Muslim rule the dress of the local people was affected and the people consciously or sub-consciously adopted Muslim dresses with slight modification. Since the middle of 19th century the district enjoyed contact with the Europeans and the factor has left an impact on the living of the people.

In rural areas generally the men put on *qamiz*, *kurta*, pyjama, *tehmat* and turban or cap. In winter they cover themselves with a *khes* or blanket. or put on a jacket (woollen), a long coat of rough texture, sweater and *phatuhi*. Usually their footwear is a *desi juti* (country shoes) generally made locally by the cobbler. Among the well-to-do zamindars and the retired literate military personnel the pattern of dress is a bit different. They put on shirt, pant, coat, pyjama and even sport a necktie. Their foot-wear is generally shoes, boots, chapal and fashionable wesern-style shoes.

Among the women and teenage girls generally a *shalwar*, *Kamiz* and *ourhni* are used. The eldery ladies also use *ghagra* (bulky skirt), now almost out of fashion or meant for special occasions. Their foot-wear is generally slipper type country shoes. Sometimes chappals and sandals are also used. In winter, woollen sweaters, shawls (made of wool or cotton) are also used. The girls belonging to the well-to-do parents and going to schools or colleges generally dress like girls of urban areas. Their *shalwars* and *churidars* and shirts and *kurtas* with *orhni* (dopatta) are akin to those put on by urban girls. Their foot-wear is chappals and sandals. In winter, they put on sweaters, cardigans and lady-coats. They also adopt new types of hairdo, different from the traditional style of rural areas.

The dress of the urbanites is diversified. Some of them also maintain the same pattern brought by them from the villages while others, being more adaptable, have adopted fashionable urban dress. In urban areas men wear *kurta*, *dhoti*, *tehmats*, collared shirt, pyjama, pant, coat, long-coat, *Jodhpuri* and even necktie, Here dress varies according to financial resources and social

position. The children put on shirts, pyjama, half-pant and pants. In winter, woollen sweaters, mufflers, cardigans, jersies and woollen-suits are worn. Their foot-wear varies from *desi juti* to ultra modern foot-wears. People from lower strata put on clothes of very gay colours. Orthodox Muslims use *qamiz, pyjama (shalwar), sherwani* and sweaters in winter. They also use a Fez cap in summer and fur-cap in winter. Westernised among the Muslims are not fastidious about dress and they use shirt, pant, coat, woollen shirts in winter with other accessories, such as sweaters, etc. The foot-wear ranges from *desi juti* to western style shoes.

Women in the urban areas dress themselves nicely. They use *sari*, blouse, *shalwar, qamiz, kurta, churidar* and *orhni* also called (*chunni*). Christian ladies also use English dress, i.e., jeans, pants and frocks, etc. The dresses of women folk vary according to the social status. More affluent ladies use very costly *sarees* and blouses and other dresses. Poor women use cheap clothes of very gaudy colours. In urban areas to have a peculiar hair-do has almost become a mania. Few women want to dress hair in the traditional manner. They even use artificial and nylon hair in order to wear a spectacular hair-do. The foot-wear used by them is *desi juti*, chappals, shoes, sandals.

The girls in urban areas generally dress themselves according to the uniforms prescribed by their schools. The Convent schools girls generally dress themselves in European manner whereas those studying in other schools put on shirt, *shalwar* and *churidars*. They generally do not put on gaudy colours. *Saree* among young girls in the district is not very common. A few girls, whose parents hail from other States and happen to be living in urban areas of the district, however, wear *sarees*.

Generally the ornaments in vogue in other parts of the country are in use in the district from very early times. The underlying idea about wearing of ornaments appears to be not only to make visible parts of the body more attractive, but also to make known to the public the financial position of the wearer. There are ornaments for hands, feet, face, nose, head and arms, etc. The designs of the ornaments for these parts of the body have, on account of varying fashions, undergone continued change.The most coveted metal for ornaments has been gold. Silver comes next. Precious stones are also used in gold ornaments making them more beautiful with the object of adding more charm to the body. For obvious reasons women have been using ornaments more as compared to men.

In rural areas the men generally do not use any ornaments. About 3-4 decades back men used *kanthas* (neck ornaments) ear-rings (*murkies*) and rings on festive occasions. Presently well-to-do persons wear rings only. Some times necklace is used by them at the time of marriages.

Among the women in rural areas rings, bangles, *karas*, necklaces and ear-rings of different designs are used. Head ornaments, '*Phul Chauk*', has become rather obsolete. Nose ring (believed to be of muslim origin) is also used by women. Its size has completely been changed. The one presently used is called *koka*, A *taragi* of silver beads knotted with a thread is sometimes tied around the waist of the male child.

The Hindu and Sikh women are very fond of gold ornaments. They wear rings, bangles, *karas*, necklaces, ear-rings, nose-rings and *kokas* of different designs. Ornaments for head have rather become out of date. They wear silver *pazaib* around ankles. They also use precious stones fitted in rings, ear-rings, and necklaces. Artificial stones are also in vogue. Rich ladies, for the sake of variety, and poor as an economic necessity also use artificial jewellery. Educated ladies have less weakness for ornaments. The ladies of trading communities have weakness for ornaments. Moreover they are in a position to afford to wear so many ornaments and jewellery.

The Muslim ladies have less craze for ornaments and jewellery because they usually remain under veil (*burka*). Christian ladies generally do not use ornaments, though there is no bar.

Food : So many factors are responsible for determining dietary habits. Availability of a thing at competitive rates and financial position of the person are *inter-alia* prime factors. For instance milk is mostly procured from rural areas, but is consumed in urban areas due to the better economic position of the urbanites.

In rural areas of the district, wheat, gram, maize and millets are consumed as cereals. In summer people eat wheat as it is available with them. After monsoon they take maize and millets. Due to water-logging in certain areas rice has begun to be grown and in due course people will be using it as well. Gram flour is used for preparing curry and *pakoras*. Villagers consume vegetables in much less quantity. They generally eat pulses particularly of *moong*, *urd* and gram. *Moth* and *Masur* are used much less. Only those vegetables are consumed by villagers as are grown on their own land, i.e. *kaddu*, *paitha*, onions and leafy vegetables, i.e. *methi*, *chulai*, *bathu* and mustard or *rai* leaves. They have started using potatoes even if they do not grow them. These are readily available with the village-grocer or hawker. Meat is used by them on special occasions. Fruit is not an item of food with the ruralites. Food is cooked in ghee or vegetable oils.Ghee is getting scarce because the villagers mostly sell the milk.

Milk, curd, *chhah* and butter are rarely used. The obvious reason is shortage of milk. *Chhah*, a commonest Punjabi beverage, has become a thing

of the past. Tea has virtually replaced it. Tea is taken in the morning, afternoon and evening. It is served even in the fields.

The commonest sweets are *ladoo, jalebi* and *mesu.* Sikhs also like *halwa* very much. On every *sankrant* they prepare *halwa.* They also like *saivyan* that they prepare in *gur* or *shakkar.*

Smoking is very common among ruralites. Sikhs abstain from smoking. Alcohol is liked by the villagers. They take it on festive occasions without any restraint. This evil is on the increase. Public sale of opium has been stopped, although it is allowed to be taken by addicts on the recommendation of medical practitioners.

Among urbanites, wheat is taken as a staple food. Rice is used by them as an additional special item. In winter they also relish maize. Millets are rarely used. Pulses of *moong, urd* and gram are commonly used. The consumption of other pulses is less. They use all kinds of vegetables available. They also use fruit of every kind and in every season. Poor, however, cannot afford it. Most of them also take meat. Certain communities, viz., Jains and Banias abstain from taking meat and eggs.

Food is generally cooked in vegetable oils or Vanaspati, ghee being used in rich families only.

Tea has become the most popular beverage. Coffee is also being used in urban circles. Milk, curd and butter, being costly, are used by the well-to-do. In summer people take cold drinks, i.e. aerated waters, syrups and sugared lime-water (*shikanjbin*).

They take all types of sweets of Punjabi and Bengali preparation. *Ladoos* and *Jalebis* rank first. Biscuits, cakes, toffees, etc., are also freely consumed by urbanites. Hindus and Sikhs take sweets in abundance on Dewali and Muslims take sweets *sainvyan* on Id-ul-Fittar and Id-ul-Zuha.

Drinking has, of late, become very common. Muslims do not take wine. The Hindus and Sikhs take it without much hesitation. Besides the rich, even the labourers and factory-workers take wine in abundance. Ludhiana being an industrial city has heavy concentration of labour who have greatly increased the consumption of liquor. They take it at the cost of necessaries and other requirements of their families.

Sports, Games and Recreations.—Sports and games are an important aspect in the physical development of the people. Wrestling, *kabbadi,* and

saunchi (now rarely seen) were popular old time sports. Wrestling and *kabbadi* may commonly be seen in the fields. The younger boys generally play *gulidanda*. In schools the boys play all the games, i.e., Hockey, Volley-ball, and Foot-ball, Some villagers also play chess and playing-cards. The girls play *rassa tapna* and other games in schools. They also play on swings as a part of *teej* ceremony in the month of August.

In urban areas people play chess and playing-cards. Some clubs are also organised in the cities for playing games. Kite-flying is also very popular. In the schools and colleges boys and girls play Foot-ball, Hockey, Basket-ball, Badminton, Tennis and Cricket. These ball-games are of western origin. People also exercise in municipal parks with *Mughdar*, dumbles, etc.

The popular recreation in towns and cities is the cinema. It is the cheapest entertainment. People in the villages also listen to bards and *dhadis*. *Qawals* and singers entertain marriage parites. Their services are requisitioned on festive occasions.

Since 1947 *Bhangra* dance has become very popular. The school and college boys in rural and urban areas perform *bhangra* on all sorts of special occasions as a part of cultural programme. On *melas* the villagers resort to performing *bhangra* to demonstrate their joy and vigour.

Communal Life :

Fairs and Festivals.—Fairs and festivals depict the cultural heritage and afford a glimpse of the life of the people. They cover the religious, social and economic field and some of them glorify the change of season. A few of them are held in commemoration of anniversaries of venerated persons.

Religious Festivals.—Amongst the Hindus there is a continuous chain of religious functions, fasts and festivals all the year round. Shivratri is celebrated by the Hindus in the month of February.

Guru Ravi Das's birthday is celebrated by the Scheduled Castes in February. Processions are taken out on the day in the towns of the district.

Holi.—Holi is celebrated among the Hindus in the month of Phalgan (March). The people observe this festival almost for a week. Men, women and children take part in it. In the villages the festival does not carry much significance. In towns and cities the festival is quite popular and celebrated enthusiastically.

Janam Ashtami.—The festival commemorates the birthday of Lord Krishna. Hindu women keep fast and visit temples which are specially

decorated on the occasion. Women take their meals after midnight—the time of the birth of the Lord.

Dussehra.—It is celebrated on the 10th of *navratra* in Asauj (September-October) in honour of the victory of Rama over Ravana, i. e. victory of virtue over vice. On the occasion, big fairs are held in Jagraon, Khanna, Payal and Raikot. A big *mela* is held in Ludhiana in Dresi Ground, where the effigies of Ravana and his relations are burnt amidst great public rejoicings.

Dewali.—The festival of lights is associated with the worship of Goddess Lakshmi and the return of Rama to his capital, Ajodhia, after his long exile. This festival is celebrated throughout India. Hindus get their houses cleaned and white-washed as a part of annual campaign of cleanliness on the festival. They light lamps in the night and distribute sweets among relations and friends. On the occasion Lakshmi, the goddess of wealth, is worshipped and the Mahajans start the new financial year.

Sikhs celebrate Dewali like the Hindus. They attach special importance to it on account of another event. The sixth Guru, Hargobind, was released on Dewali day from the Gwalior fort. Instead of Holi they celebrate Hola Mohalla on the day following Holi.

In addition to the above festivals, the Sikhs also celebrate Baisakhi, Martyrdoms of Guru Arjan Dev and Guru Teg Bahadur and birthdays of Guru Nanak and Gobind Singh. Guru Arjan Dev's martyrdom day is celebrated in the month of May/June, Guru Tegh Bahadur's martyrdom and Guru Nanak Dev's birthday in November and Guru Gobind Singh's birthday in December-January. *Langar* is served on thse occasions in *Gurdwaras.* On Guru Arjan Dev's martyrdom day in May/June sweatened-water with milk (*kachilassi*) is served to the people.

Baisakhi has special significance for the Sikhs. On this day in A.D. 1699 at Anandpur Sahib Guru Gobind Singh formed the Khalsa.

Jain Festivals.—Mahavir Jayanti is celebrated by taking out processions of pictures of Lord Mahavir. The Jains observe fasts on the day. It falls in the month of Chaitra (March). Puryushan is celebrated in the month of Bhadra (August/September) when Jains go on fast for purifying their soul. *Samatsari* marks the end of Puryushan. Jains beg pardon from persons for any wrong they might have done to them.

Muslim Festivals.—Muhammedan festivals and fairs are Moharram, Bara Wafat, Shab-i-Brat, Ramzan, Id-ul-Fitur and Id-ul-Azha. Moharram is celebrated on the 10th of the month of said name in memory of Hazrat Imam and Hussain, who laid their lives fighting against the tyranny of

Yazid. Bara Wafat is celebrated on the 12th day of Rabi-ul-awal. On the birthday of prophet Hazrat Muhammad the teachings of Islam are explained to the people and the holy Koran is recited. On Shab-i-Brat, celebrated with fireworks, the Muhammadans distribute food among the poor and offer ablutions to their deceased forefathers. Ramzan is the holy month throughout which purificatory fasts are observed. Id-ul-Fitar marks the end of the fasts on termination of Ramzan. Prayers are offered in mosques. People exchange presents and rejoice among friends and relations. Id-ul-Zuha falls on the 9th and 10th Zilhij. People on this occasion go on Haj to Mecca and Medina.

There are some festivals concerned with the change of season, viz., Lohri, Basant and Baisakhi. These festivals are celebrated throughout the district. Lohri signifies the climax of winter, Basant the end of winter and beginning of spring, and Baisakhi the beginning of summer and ushers the harvesting season.

The list of other *Melas* held in the district is given below :

Serial No.	Name of the fair/*Mela*	Place where held	Date/month in which held	Significance of the fair
1	Chappar ..	Chhapar Mari	9th/11th Sept.	In honour of Gugga the famous warrior
2	Chet Chaudash ..	Ludhiana	March	..
3	Dhakam Daki fair ..	Khanna Kalan	August	..
4	Grewal Sports fair ..	Qila Raipur	February	Rural activities
5	Gugga Naumi ..	Takhran	September	In honour of Gugga—famous Rajput warrior
6	Gugga Naumi ..	Pawa	September	Ditto
7	Jangpur fair ..	Janganpur	October	Death anniversary of Budha Shah
8	Jarg fair ..	Jarg	March	In worship of 'Mata goddess'
9	Kaler ..	Kaler	August	..
10	Pabbian fair ..	Pabbian	March	Rural chivalry
11	Raikot Ashtami fair ..	Raikot	September	In honour of Gugga—famous Rajput warrior
12	Roshni ..	Jagraon	24th/26th February	Death anniversary of Baba Mohkam Din

Serial No.	Name of the fair/*Mela*	Place where held	Date/month in which held	Significance of the fair
13	Roshni ..	Ludhiana	March	Muslim Pir's death anniversary. It has not been held after partition. Earlier it was celebrated at Dresi Ground.
14	S. Santa Singh fair ..	Harion	March	Babar Akali Movement
15	Sabha ..	Machhiwara	December	In memory of Guru Gobind Singh

Folk Songs and cultural life.—Folk songs are the poetical expression of the sentiments and ideas of the people about various aspects of their general life. As the epitome of the aspirations, hopes and fears of the community as a whole, these form a part of the cultural heritage of the people. It is hardly possible to trace the origin of a particular song. These were not composed by any reputed poet. These were in fact the spontaneous expressions of feelings of the ordinary folks. That is why these songs have powerful appeal and leave deep and lasting impressions.

Ludhiana District has no distinct culture of its own and to all intents and purposes forms a part of the Punjabi culture as a whole (including West Punjab). Chenab river (though situated in West Pakistan), for instance, still continues to be considered a river of love and the Satluj, howsoever mighty it may be, cannot replace it. For the expression of love, we quote the passages of romantic works having their origin in West Punjab. We do not intend to replace these because these are quite agreeable to us as the expression of our own sentiments.

Folk songs depict different facets of life. There are folk songs on marriage, *sethnis, ghoris,* love, separation from husband, quarrels with sister-in-law (*nanad*), brother-in-law (*dewar*) and mother-in-law (*sas*), remembering her husband gone abroad and also remembering her mother, brother and father. The folk songs indicating freedom movement are also available, depicting vividly the intense feeling of the people for freedom. These reflect the reaction of the people to the contemporary political developments, even though these are couched in crude language and do not come to recognised and refined standard of poetry.

Except the folk songs of the freedom struggle and some songs written for the propagation of development schemes, the society, we come across in folk songs, pertains to the 19th century and even earlier.

A few extracts from representative folk songs pertaining to various aspects of life have been reproduced here under:

"Bara Maha"

The change of seasons in the Punjab is generally described in a spectacular manner with reference to the months of the year. The month of 'Har' (June-July) figures thus in a folk song :—

"*Charhia Mahina Har keh tapan Pahar ke balan angithian Mahi gia pardes men birhoon luthian*"

The month of Har is there. Even the hills appear to be red-hot,

The weather appears to be as hot as live coal.

My love has gone abroad and I am being burnt by the pangs of separation.

The dialogue between the newly wedded bride and a brother-in-law is expressed :

Bhabhi bhabi karda bhabie, parhda teri bani

Nikki jahi gal ton pia poara, tand di bangiu tani
Tae bhabi ghar bar sanbh le, rati fark na jani

Marde deorde munh wich pa de pani.

(the brother-in-law) shouts, 'Bhabhi, Bhabhi, like a morning prayer,
A small matter has become a big tangle and a single thread has become a warf.

O, sister-in-law, look after your household,

Do not show any discrimination,

Put water in the mouth of the dying brother-in-law.

The song of the girls busy in mass spinning is typical of their innocent feelings :

Sun we Surja, sun we channa Naini nir wahawan
Dunia mauj kardi, men tand dukhan de pauwan.

Listen O sun, listen O Moon,

Tears flow from my eyes,

The world is busy merry making, while I am spinning yarns of sorrow.

Another popular song sung at the time of mass spinning run :

Wagdi ae Ravi, wich rurhde ne jale we,

Chhad gaion but, rooh lae gaion nale we,

Wagdi ae Ravi, which rurhde bahere we,

Akhian ke laian, rogh zindgi lai sahede we.

There flows river Ravi,
Wherein float nets,
Left without you I am no more than a dead body,
Because you have taken away my soul with yourself,
There flows river Ravi, wherein float 'Baheras',
Eversince I have exchanged glances with you,
I have been afflicted with life long suffering.

The precarious life of a tree on the bank of a stream has been pathetically described :

Nadi kinare rukhra, khara si aman amman,
Digdha hoea bolia, ji de nall jahan.

The tree alongside the stream stood in peace,
As it fell, it cried,
"The world is for the living".

The strong feeling of love and affection for mother is thus described by a daughter :

Men tan sau sau rukh pai lawan, rukh tan hare bhare,
Mawan thandian chhawan, chhawan kaon kare.

I plant hundreds of trees, the trees grow green,
How cool is the shade of a mother,
Who else can provide such a shelter.

Mother earth, the source of all blessings, can hardly boast of a more colourful description :

Dhartie piar karendie tera matha noor-o-noor,
Sir te subhar sohanda, Ghagra hara kachoor.

O loving earth, thy forehead is glowing with light,
On your head you wear a lovely red wedding garment
And thy skirt is deep green.

The cycle of seasons in terms of its impact on personal health is eloquently expressed in the rhyme :

Chet Waisakh bhawain, Jeth Har sawain,
Saon Bhadon nahawe, Assu katee kaura khawe,
Maghar Poh roon handhawe, Magh Phaggan tel malawe,
Hakim da ghar kade no puchhan jawe.

One should wander a good deal during Chet and Baisakh,
Sleep much during Jeth and Har,
Bathe a lot during Sawan and Bhadon,
Eat bitter food during Asuj and Katak,
Wear cotton padded clothes during Maghar and Poh,
Massage the body during Magh and Phagun,
With these instructions one need never enquire about the address of the physician.

The pen picture of a village and the notable things about it are the subject of another song :

Pindan wichon pind sunida, pind sunida Moga,
Urle pase dhab sunidi, parle pase tobha,
Tobhe te ek sadhu rehenda, bohat sunidi sobha,
Aondi jaandi nu ghara chakaonda, magron marda godha,
Lak mera patla jeha, bhar sahen ni joga.

The most notable among the villages is the village of Moga.
On this side is situated a water shed,
On the other lies a deep pond,
On the bank of the pond dwells a Sadhu,
Whose fame is spread far and wide,
He helps the women folk in lifting their pitchers,
But gives them a knee kick thereafter,
I have a thin waist and can hardly bear the heavy burden.

Replacement of old leaves with new ones on the advent of spring could not find a more faithful description than the couplet :

Pipal dia patia we, kahi khar khar lae ae,
Jhar po porania we, rutt nawaen di aae ae.

O' old pipal leaf why are you fluttering in the wind,
Fall down the old ones,
It is the season for the new leaves.

PART B—'Rehabilitation'

(a) Long awaited and hard won freedom brought in its wake the catastrophe of partition of the country. Twenty-nine districts of the United Punjab were *inter-alia* divided into two portions designated as West Punjab and East Punjab. The former was ceded to Pakistan and the latter fell to the share of India. The East Punjab comprised 13 districts. The partition also involved mass migration of population of particular denomination from one to the other province as a consequence of widespread and violant communal disturbances throughout the West Punjab and, as a reaction, in certain districts of East Punjab. Hindus and Sikhs, and Muhammadans who were living peacefully since long became hostile to one another. The minorities of each newly formed province were driven to abandon their hearths and homes as a result of communal riots followed by loot, arson and ruthless destruction of properties. The urban minorities of West Pakistan migrated to India by trains and in caravans on foot. The rural minorities of West Pakistan migrated in general in long caravans of bullock-carts and foot convoys. Quite often these caravans were attacked by miscreants resulting in considerable loss of life and personal effects. Throughout their tiresome journey they faced scarcity of food and drinking water for themselves and non availability of fodder for their cattle.

As Muslim cultivators in Ludhiana district were having very small holdings, equal number of Hindus and Sikh cultivators could not be settled there. About 3,02,482 Muslims left the district and in their place 1,69,267 displaced Hindus and Sikhs were settled. Out of these 1.2 lakhs were Sikhs and about 68,000 Hindus. Out of 1,69,267 migrants 46 per cent, i.e., 77,980 were settled in rural areas and 54 per cent, i.e., 91,287 were settled in urban areas.

The migration of Hindus and Sikhs in the district and exodus of Muslims terribly shattered the economy of the district. A considerable shortage of skilled labour in industry and in petty jobs was felt. In the field of agriculture acute shortage of vegetable growers was experienced. The Hindu and Sikh displaced persons who settled in the district were mainly agriculturists and from commercial communities. They were not keen to take up petty skilled jobs. The immigrants comprised Aroras, Khatris, Jats, Mazhbi Jats, Kambos and other miscellaneous castes, Scheduled Castes and Backward Classes. They were very energetic and eager for work. The urbanites amongst them were educated and members of middle classes.

(b) **Refugee Camps.**—It was originally decided to open a big camp to accommodate about 5 Lakh persons at Kurukshetra in Karnal district and thereafter to start subsidiary camps at important centres, such as Amritsar, Gurdaspur, Jullundur, Ludhiana and Ambala. The influx of the refugees proved to be so sudden and unexpected that immediate necessity of opening

relief camps in the interior of Punjab was keenly felt. A camp was accordingly established by the end of 1947 at Ludhiana. It was known as Jawahar Nagar Camp. Government also decided to face the colossal problem by giving prompt and adequate relief to refugees. Pamphlets were distributed in Urdu and Punjabi among non-Muslim relief camps in Pakistan as well as in India, indicating that people coming from Sargodha, Rawalpindi, Jhelum, Gujranwala and Lyallpur should settle in Ludhiana district. It was also decided that persons from places at district headquarters, tahsil headquarters and village areas should be settled in similar places. Since the educational institutions during the emergency in the district were requisitioned to provide accommodation for refugees, schools and colleges remained closed till February, 1948. The educational staff and students were called upon to work in the camps.

In the camps free rations were given to the refugees. Fruits, multivitamin tablets and other special items of diet were also given to refugees on medical advice. Cleanliness was maintained in the camps. Wherever possible the camps were provided with lighting facilities. Dispensaries were opened in camps. No refugee died of starvation or lack of medical aid in camps.

These camps proved a great boon to the immigrants, who, while staying there, tried to find some jobs to rehabilitate themselves. The people coming from rural areas were resettled in villages where they were temporarily allotted land of the Muslim evacuees for cultivation. The refugees in urban areas took up miscellaneous occupations. The most distressing part of the tragedy of partition was the problem of unfortunate and unattached women and orphan children. To render succour to these unfortunate victims, it was decided to set up an infirmary in Model Town, Khanna, in 1950. The inmates were paid gratuitous relief in the form of food, clothing and toilet allowance in cash. To provide facilities for training to the inmates and to enable them to rehabilitate themselves, a training-cum-production centre was set up in the infirmary, where training in various crafts, such as tailoring, weaving and hand embriodery, was imparted. The Government further gave a grant of Rs 200 per head on marriage of the daughters of the inmates. Loans and financial assistance were also given to workers who, after getting proper training in crafts, were found to be capable of earning their livlihood independently.

The issue of free ration to the refugees indefinitely in the camps was likely to produce demoralising results. It affected the determination of refugees to be able to stand on their own legs. It was also felt that their dispersal would expedite their rehabilitation as their concentration in camps was not by itself a solution of the problem of their rehabilitation. The first step taken in this direction was the gradual reduction in ration of such families as had an adult member from 16 to 60 years otherwise physically fit, who were employed on their

own or through Government agencies. Those adults who refused to be employed in this manner were de-rationed along with their family members. In order to rehabilitate the agriculturists, immediate steps were taken to allot land to them and as soon as the needful was done they were required to leave the camps to work in the fields.

(c) **Rural Rehabilitation.**—At the time of the partition *Kharif* crops were standing. The agriculturists who either owned land or held any Jagir or cultivated land were declared eligible for allotment of land temporarily, on the basis of 10 acres per family. A good number of cultivators who had brought their bullock-carts and cattle with them, were moved straight into Muslim evacuee villages to resume cultivation of the land. A majority of such persons, who went straight to the villages, consisted of self-cultivating proprietors and tenants. Thereby the authorities wanted to ensure quick distribution of land as also to provide for the refugee farmers who had the resources to start cultivation immediately. Under this system, each family was given a plough unit (about 10 acres) of land regardless of the size of the holding left by it and was also given financial assistance in the form of food and *taccavi* loans. This measure not only provided an occupation and means of livelihood to a very large number of displaced persons ; but also had a very healthy effect on agricultural production in the State. In spite of its completely shattered economy during the post-partition years, the agricultural production in the Punjab did not suffer or remain low for very long.

In the beginning, allotment was made on group basis. Persons who were near relations, although they belonged to different districts, formed themselves into groups and secured temporary allotment. Government encouraged this practice because of insecurity then prevailing all around. This policy was, however, not adhered to in the cases of gardens and vegetable growing lands.

Quasi permanent Allotment of Land.—By April, 1948 near normalcy was restored. Government, therefore, decided to allot land to the cultivator on more enduring basis. This was considered necessary in order to make the cultivators feel secure and effect rapid development in cultivation. This arrangement gave the feeling of permanent re-settlement to the agricultural refugees.

Verification of claims.—Before final allotment of land to the agriculturists it was essential to verify their claims. Accordingly claims from refugees were invited. In certain cases those were found to be highly inflated. Before the claims could be admitted it was felt that tallying them with the original *Jamabandis* left in Pakistan would be necessary. Pakistan Government after pretty long formalities made available the original records on reciprocal basis. The claims of displaced persons, thus, were verified for compensation. In order to standardise the rights of the claimants, the modes of cultivation of

different tracts of land in West Pakistan were classified and evaluated. The area of every claimant was then converted into the newly evolved term, "standard acre". As a result of this evaluation in terms of standard acres, a piece of land on one side of the border could be easily balanced against a piece of land on the other.

Graded Cut.—The area left in the West Pakistan was 67.22 lakh acres as compared to the abandoned area of 47.3 lakh acres in the State. The losses in cultivable area were tremendous. The losses in irrigated areas were even heavier. The problem in preparing the schemes of land resettlement was to satisfy the individual claims of land of about 5 lakhs of persons with merely 62 per cent of the area abondoned by them. This disparity in the area made it essential to distribute the difference equitably amongst claimants of different groups. To reduce this gap, a scheme of cuts to be applied to the previous holdings of refugees was considered imperative. It was, as such, decided to impose progressive cuts on the increased holdings. It was also decided that standardisation should precede the cut.

In the district the displaced agriculturists from Sargodha, Lyallpur and Gujranwala were settled in addition to its own colonists from Lyallpur and Montgomery districts.

The graded cut in the allotment of land was made in accordance with the formula given below :

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	Per cent
Up to 10 acres ..	25
More than 10 acres but not more than 30 ..	30
More than 30 but not more than 40 ..	40
More than 40 acres but not more than 60 ..	50
More than 60 acres but not more than 100 ..	65
More than 100 acres but not more than 150 ..	70
More than 150 acres but not more than 200 ..	75
More than 200 acres but not more than 250 ..	80
More than 250 acres but not more than 500 ..	85
More than 500 acres but not more than 1,000 ..	90
More than 1,000 acres ..	95

Sub-Allocation Scheme.—The following scheme of sub-allocation was made for the allotment of land in the district :—

Colonists.—Besides those who had already settled in the district, the colonists of Ludhiana were to be provided 5,000 standard acres in Jullundur district and further it was arranged to provide 9,080 standard acres in Barnala district (now part of Sangrur district) of erstwhile Pepsu. Land was to be given in Barnala to (a) the colonists of Lyallpur district originally belonging to Ludhiana district, (b) those colonists who had already settled in erstwhile Pepsu and desired to remain there and (c) those colonists who had expressed a wish to settle in erstwhile Pepsu.—

For displaced persons from Rawalpindi Division the land was allotted to the following :—

(a) Gujrat	..	Nithar circle of Gujrat tahsil, Hithar east and west of Phalia tahsil and Bet Jhelum and Chak Jhelum of Kharian tahsil
(b) Attock	..	Attock tahsil, Fatehjang tahsil, Talagang tahsil and colonists of Attock district
(c) Shahpur	..	Chak Jhelum of Khushab tahsil, Chak Sobhaga of Sargodha tahsil, Bet Jhelum and Chenab Hethla of Bhalwal tahsil

The provision of 5,000 standard acres for Lyallpur non-colonists was designed to meet the claims of Lyallpur non-colonists belonging to villages in which land was held by the colonists from Ludhiana district, provided the papers had been prepared on the basis of *Jamabandi* without being supported by regular claims. Those Lyallpur non-colonists who had expressed a wish to settle in Ludhiana district were also allowed to do so.

Sub-Allocation Adjustments.—(a) Under instructions, dated December 2, 1949, the available evacuee area in the Kandaghat, Kalsia and Nalagarh tahsils of Kohistan districts (erstwhile Pepsu) was made available for the settlement of claims of Rawalpindi Division surplus to Ambala and Ludhiana districts.

(b) Under instructions, dated December 12, 1949, additional claims of Shahpur (1,000 standard acres) Gujrat (2,500 standard acres) were to be allocated respectively in the Samrala, Ludhiana and Jagraon tahsils.

(c) Acceptance for settlement of claims of Ludhiana colonists surplus to Barnala and Fatehgarh amounting to 2,500 standard acres and ;

(d) Under instructions, dated February 14, 1950 :

(i) Further claims of Ludhiana colonists amounting to 1,000 standard acres were to be taken over from Fatehgarh district ; and

(ii) Further claims of Ludhiana colonists amounting to 355 standard acres to be taken by Barnala.

Ludhiana District.—Resettlement Figures (net standard acres) :

Tahsil	Area available	Area required for own colonists	Proposed resettlement		
Ludhiana	48,967		Rawalpindi	1,000	
Jagraon	36,806		Attock	5,000	(overflow of Ludhiana colonists into)
Samrala	24,193		Shahpur	10,000	
			Gujrat	5,000	(Pepsu 9,080 Barnala District)
	109,966	96,046			
			Jhelum	1,500	
			Lyallpur non-colonists	5,000	(Jullundur 5,000)
			Own Colonists	81,966	
			Reserve	500	
				109,966	

Allotment of land in Ludhiana district to displaced persons having verified claims under the compensation scheme:

Tahsil	No. of land claimants		No. of land claimants whose cases have been settled properly		Amount of compensation paid in respect of claimants under column 3
	Rural	Urban	By allotment of land by granting rights	By transfer of property payment in cash and by adjustment of public dues	
1	2	3	4	5	6
Ludhiana			5,472		
Jagraon			4,053		
Samrala			3,479		
			13,004		

Ludhiana district had a combined scheme for the allocation of claims of Rawalpindi Division with Ambala and the former Kalsia tahsil of erstwhile Pepsu.

Agricultural Loans.—Allotment of land on quasi-permanent basis could not by itself be sufficient for the rehabilitation of refugees. They were given financial assistance in the form of agricultural loans for the purchase of bullocks, agricultural implements, fodder, seeds and for repairing wells and houses. In order to minimise the chances of misuse, a general policy was devised to advance these loans in kind. A sum of Rs 41,37,971 was advanced from 1947-48 to 1953-54. The disbursement of this loan was stopped beyond 1953-54.

Conferment of Permanent Proprietary Rights.—The work of the conferment of permanent rights on the allottees was taken in hand in September, 1955. These rights were conferred on those allottees who had already got land allotted to them on quasi-permanent basis.

Rural Housing.—On account of the heavy rains and floods, a large number of houses occupied by land holders, including landless persons, Harijan tenants, menials and shop-keepers got damaged beyond repair. Another feature of the rural housing problem was that the houses were unevenly distributed ; while in a few villages the number of houses was in excess to the needs of the allottees, in a large number of other villages almost all the built up structures had crumbled down. The houses in excess of the needs of the allottees in a number of villages could not be used for making up the deficiency of accommodation in other villages.

Like the allotment of land the houses were allotted on a temporary basis in the first instance. Regular rules for the allotment of these houses were framed thereafter as a part of the quasi-permanent land allotment. The records regarding the list of the evacuee houses in the village, the number of rooms and other accommodation in each house, with their exact dimensions, the general condition and the approximate value of the house, the list of the allottees along with the remarks as to how these had been allotted to them (i.e. the land allotted to them on quasi-permanent basis) and the value of the houses left by the allottees in West Pakistan, were got prepared. The *Halqa* Revenue Officer, who used to be generally a Naib-Tahsildar, was entrusted with the rural allotment work. The list giving the order of procedence was got prepared so that every body knew his position in the merit list. After reservation of a few houses for the common use, the allottee number 1 on the list was given the selection of the houses available in the village. Thereafter the other allottees were also given a chance of selection according to their merit in the list. The work of allotment of rural houses was taken up immediately after the allotment of land on quasi-permanent basis.

Garden Colonies.—The garden colonies scheme which was a part of the general rural resettlement plan helped the Government to bring more area under gardens. The availability of compact evacuee areas made this scheme possible. The Government, therefore, decided to provide land in units of 10 acres to 20 acres, to those persons who would undertake to layout gardens and conform to other Government regulations. Those who received allotments on these colonies would surrender an equal area out of the area allotable to them under the quasi-permanent allotment scheme. Only those displaced persons who were having some experience of gardening were to be allotted land in these colonies. These colonies were organised on co-operative basis and adequate irrigation facility was provided through tube-wells or canals. There was provision for all the modern appliances, such as tractors, power, spraying for saving the fruit trees from insects, pests and diseases, sanitary houses on modern lines, community dining halls, schools, creches for children, dispensaries, guest houses, clubs and reading rooms.

In the district two villages were allotted for the garden colonies. Subsidiary industries such as fruit preservation, extraction of fruit juices and cordials are proposed to be set up under these villages.

(d) **Urban Rehabilitation.**—The resettlement of displaced persons in the urban areas was equally colossal and complicated. The inordinate delay in the payment of compensation for the properties left by them in West Pakistan, in cash or kind was further responsible for deterioration in their lot. The resettlement of the urbanites was quite different from that of the ruralites. As discussed earlier, the rural-rehabilitation was possible to a large extent by allotment of land and by advancing agricultural and other miscellaneous loans. The urbanites had no accommodation, not to talk of its being satisfactory, for residential and commercial purposes. Besides they had no capital to start business. The ruralites who were generally cultivators could be resettled in their previous professions as their brethren were also running similar type of business in the East Punjab. As regards the urbanites, the number of residential houses and commercial sites and shops left by them were far more in number than those left behind by Muhammadans in East Punjab. Furthermore, a void was created in business, for the Muslims who migrated to Pakistan were generally craftsman, artisans and technical labourers in industry whereas the newcomers were generally shop-keepers or industrialists. In industry, too, the Muslims had no significant part to play. Wherever they were engaged in industry, they could be said to be running petty workshops. The ratio of the industrialists who came into the East Punjab and the Muslims who left for Pakistan was 13 : 1. Even this ratio does not depict the correct picture for the migrant non-Muslim industrialists were running well-equipped and organised

workshops and factories and the Muslims had at best owned small establishments or repair shops, etc. In brief, in the case of urban resettlement, residential accommodation, commercial accommodation, training in specialised jobs and financial assistance were the main problems. Any delay in their rehabilitation could further worsen their condition and demoralise them.

After the partition all the Muslim abandoned properties were taken over as evacuee properties and were governed by the Administration of Evacuee Ordinance IV of 1947, later replaced by the Administration of Evacuee Property Act, 1950. These properties which comprised houses, shops, vacant sites, *kholas* (dilapidated houses) and industrial establishments were allotted to displaced persons on rental basis. The work of permanent disposal of these properties started in 1953-54 when the settlement organisation in the Ministry of Rehabilitation, Government of India, was established in the Punjab under Settlement Officer, Ludhiana. In all 27,374 properties including shops, houses, commercial establishments and industrial units were taken on record of the acquired evacuee property situated in Ludhiana, Jagraon, Raikot, Samrala, Khanna and other urban towns. This number included 10,006 allotable and 6,267 saleable properties. The definition of allotable properties is the property evaluated up to 15,000 under authorised possession of the displaced persons. The properties evaluated up to ten thousand, which were in possession of non-displaced members of Scheduled Castes and Backward Classes, were also enlisted as allotable properties. The rest were to be disposed of by auction.

5,335 properties were transferred to the claimant displaced persons and 3,430 to non-claimant occupants, 5,103 properties were sold by auction and 463 by compulsory allotment to the holders of accounts which were not utilised by the claimants within the reasonable time. All such properties had been sold by negotiations.

Housing Schemes.—The number of incoming displaced persons in the district was far more than the number of outgoing Muslims from the district. Initially the Jawahar Nagar Camp was set up as a colony with 1,300 mud-huts, but very soon it was realised that neither the Jawahar Nagar Camp nor the evacuee houses, vacant sites, shops and industrial establishments would be sufficient to meet the residential requirements of the vast numbers of the displaced persons.

The provision of residential accommodation became the top priority liability of the Government under the Rehabilitation Scheme. Accordingly the following new colonies came into existence in the district as a result of rehabilitation of the displaced persons. The houses, shops and plots were given on instalment basis payable over 15 years. Later on their prices were also adjusted against the verified claims of displaced persons. A sum of Rs 18,81,535.50

paise was advanced as house building loans for construction of houses on the plots.

Description of the properties :

1. Model Town, Ludhiana	..	Houses	473
		Plots	685
		Shops	24
2. Model Town, Khanna	..	Houses	202
New Model Town, Colony, Ludhiana		Houses	290
Shops, Jawahar Nagar Camp	..		40
3. Four Marla Cheap Tenement Colonies at Ludhiana			400
Four Marla Cheap Tanements Colonies at Khanna	..		400
Jawahar Nagar Mud-hut Colony, Ludhiana	..		1,300

Apart from above the shops/stalls were also constructed/laid out in refugee market known as Old Police Lines, Ludhiana.

No. of old shops	..	143
No. of new shops	..	104
No. of plots for timber merchants	..	17

These housing schemes were drawn up to meet the situation arising from inadequate residential accommodation and to provide shelter to the incoming population according to their income groups. The new townships accommodated the rich and upper middle class displaced persons, the 2-Marla (cheap) Housing Colonies provided houses to the lower middle class and the 4-Marla (cheap) tenements to the poor or such displaced persons as were occupying places of worship or living in *dharamshalas*, mud hut colonies, women homes and infirmaries.

All these schemes were financed by Government of India and the amount spent on them had been treated as loan to the Punjab Government repayable in 20 years, with interest ranging between 3 per cent to 4½ per cent. The expenditure incurred on the construction of 4-Marla (cheap) tenements was, however, treated as an outright grant for the purpose.

The two schemes, i.e., New Townships Scheme and 8-Marla (cheap) housing colonies scheme envisaged the construction of houses and laying out of plots which had been disposed of at the reserve sale price, under a State Act, viz. East Punjab Refugees Rehabilitation (Building and Building Sites) Act,

1948. The cost of houses and plots sold was treated as loan and was to be recovered with interest in 30 half-yearly instalments. Subsequently with the implementation of the compensation scheme in 1954-55 the benefit of adjustment of public dues against the verified claims was extended to the purchasers of houses and plots in all these rehabilitation colonies. In all these colonies satisfactory arrangement for underground drainage, water-supply and electricity had been made and provision was made for amenities such as school buildings, public parks, hospitals, clubs, libraries and religious places. Most of these plots had been sold to private registered bodies at half the reserve sale price on the condition that the plots sold would be utilised for the purpose for which these were earmarked. Shopping centres had also been provided in these colonies.

Later on in 1953 it was decided to transfer proprietary rights of the mud huts to inmates of these huts. The claimant occupants were required to pay the cost of land and the superstructure. The cost from the non-claimant occupants was to be recovered in 3 equal instalments. It was also decided that nothing should be charged from destitute widows and disabled persons.

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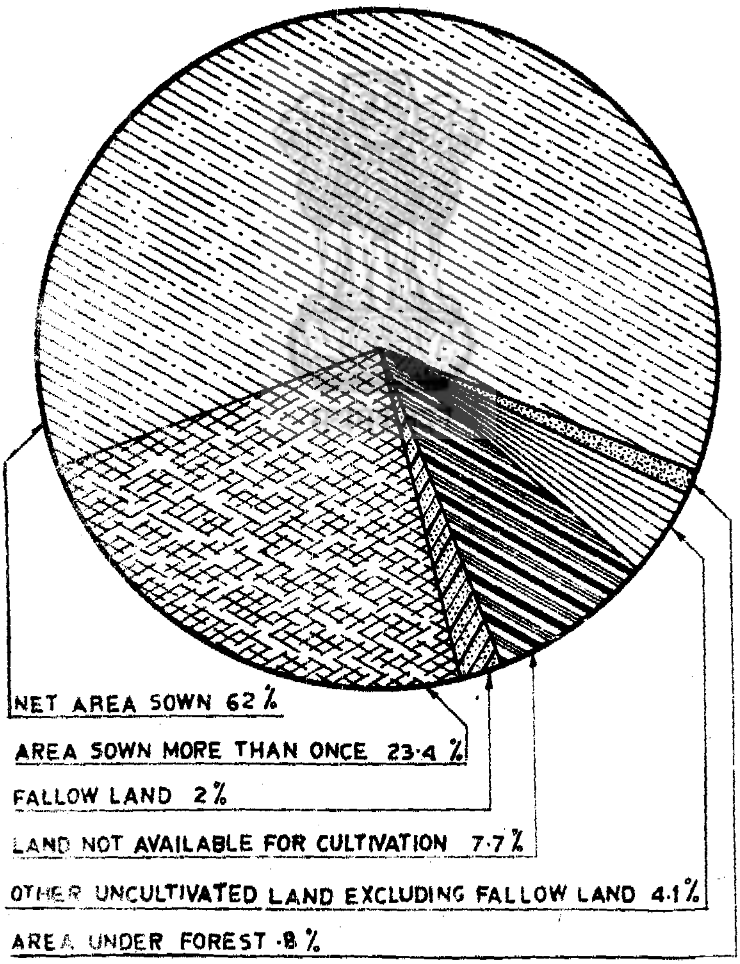
LAND UTILISATION
1965 – 66



JAN. 1969

CHAPTER IV

AGRICULTURE AND IRRIGATION

(a) Land Reclamation and Utilisation

(i) *Land Utilisation*:—The utilisation of land in a region or a particular area depends largely on its physical, cultural and economic environments. In other words, it is governed by such factors as configuration of land, amount and distribution of rainfall, fertility of soil, density of population and dietary habits of the people, number and types of draught and domestic animals, agricultural practices followed, stage of industrial development, transport facilities and the demand for its produce. Since most of these factors are changeable, there is a corresponding change in land utilisation.

Ludhiana is a thickly populated district covering an area of 375 thousand hectares. Since 1961-62, Ludhiana district has been included in the Intensive Agricultural District programme or popularly called ,Package Programme' under which new scientific pattern of crop production has been introduced. The major crops grown in the district are wheat, gram, maize, cotton, groundnut and sugarcane. As a result of the changing conditions of soil and climate, cropping pattern of the district is also undergoing a steady transition.

The following table gives classification of area by land use in the district during the years 1950-51, 1955-56 and 1960-61 to 1965-66:—

Classification of Area by Land Use in Ludhiana District

(Thousand hectares)

	Particulars	1950-51	1955-56	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
1.	Total area according to village papers	344	344	342	343	343	*375	375	375
2.	Forests	(a)	1	1	1	1	1	4	4
3.	Land not available for cultivation	32	33	38	36	39	38	38	38
4.	Other uncultivated land excluding current fallows—	31	26	25	21	20	19	20	20
	(i) Culturable waste	30	25	24	20	19	18	20	20
	(ii) Permanent pastures and grazing lands	0·40	0·90	0·82	1	1	1	—	—
	(iii) Land under miscellaneous tree crops and groves not included in the net area sown	—	—	—	—	—	—	—	—

Particulars	1950-51	1955-56	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
5. Fallow lands –								
(i) Current fallows	36	28	11	10	11	8	12	9
(ii) Other fallow lands	36	28	11	10	11	8	12	9
6. Net area sown	245	256	267	274	272	308	301	304
7 Area sown more than once	59	78	66	71	75	95	119	115
8. Total cropped area (6+7)	304	334	333	345	346	403	420	419

(*Statistical Abstract of Punjab*, 1966, pp. 42– 49)

*Increase is due to transfer of sub-tahsil Payal from Patiala District to Ludhiana District.

(a) Means below 500 hectares.

Note.– Minor differences are due to rounding figures.

The area under culturable waste has considerably decreased during the last decade and a half. It is being progressively reclaimed and brought under the plough. The area under current fallows has been reduced in 1965-66 to 1/4th of what it was in 1950-51. Consequently, the net area actually sown has increased from 245 thousand hectares in 1950-51 to 304 hectares in 1965-66. The available land in the district is mainly used for agricultural purposes. There is little scope for further extension in cultivable area. In order to increase the production, efforts have, therefore, to be made towards raising the per acre yields of crops and increasing the cropping intensity. There is scope for more scientific cultivation with better land management, proper drainage, improved seeds, improved agricultural practices and use of right types of manures and fertilizers. The programme of intensive agricultural production, therefore, essentially depends on soil conservation measures, expansion in irrigation facilities and the introduction of high-yielding varieties of seeds.

(ii) Culturable Waste.—Some area has been taken for a project by the land reclamation section of the Agriculture Department. The farmers in the district are very eager to bring every inch of land under the plough. Besides, the East Punjab Utilization of Lands Act, 1949, authorises the Government to assume such cultivable land as is not fully utilised by the farmer. There is, therefore, not much of cultivable waste land available with the individual farmer. Whatever small area exists, it is only due to increase in the area affected by *kallar* or water logging, etc.

The cultivable waste in the village common lands has been brought under cultivation by the village panchayats, but still some area has to remain uncultivated as it is to be utilised as common grazing land. Loans are advanced to

village panchayats for purchase of tractors, implements, seeds and fertilizers and for sinking wells, tubewells, etc.

(iii) **Reclamation of Water-logged Area, Swamps, etc.**—Soil erosion through water and wind and water-logging are not serious problems in the district, but it cannot be denied that, in one form or the other, soil erosion is taking place and, alongside the Budha Nala, there is a problem of water-logging in Machhiwara, Mangat and Sidhwan Bet Blocks. Similarly, along the main canals, the water-logging conditions are appearing. Besides the above, upward flow of salts and their deposit on the surface is creating saline conditions and, thus, making the land unfit for cultivation. The construction of bunds around fields, planting of *sarkanda*, digging of drains, construction of embankments alongside the river and spurs, levelling of fields and plugging of gullies are some of the measures being adopted by cultivators to fight soil erosion, water-logging and depositing of undersirable encrustation at the top. Besides, more use of sub-soil water by tubewells, pumping-sets and percolation wells and less of canal water will greatly help in reducing water-logging and alkaline conditions in the area.

There is considerable area under swamps in the district.

The extent of the problem of saline *thur* and alkaline *sem* in the district during the *rabi* season of 1966, as compared with that of the corresponding harvest season in the preceding year, i.e., *rabi* 1965, is shown below :

Description of areas	*Thur (acres)*		*Sem (acres)*		*Number of estates affected*	
	Rabi 1965	Rabi 1966	Rabi 1965	Rabi 1966	Rabi 1965	Rabi 1966
Cultivated	1,288	1,499	1,204	765	115	117
Fallow (broken)	177	135	1,039	831		
Un-cultivated (never broken)	1,471	1,425	1,559	1,783		
Total	2,936	3,059	3,802	3,379		

(*Source* : Revenue Department, Punjab).

(b) Irrigation

Variations in timings of rainfall affect the sowing as well as the harvesting of crops, particularly those of the *kharif*. A fair amount of rainfall towards the end of June or in the beginning of July leads to an all-round sowing activity,

while a failure of rain in the second half of July and also in August, followed by September, leads to the crops being scorched by the sun. The table below shows the relation between the variations in rainfall and the failure of crops in the district. :

Rainfall in Ludhiana District

Actual for 10 *Years* 1956-57 *to* 1965-66

(Inches)

Year	July	August	September	October	Area under crops failed (Acres)
1956-57	—	—	—	5·81	15,879
1957-58	6·74	6·02	4·64	0·92	25,117
1958-59	3·93	1·37	7·01	3·74	116,584
1959-60	5·41	11·60	4·85	1·34	29,147
1960-61	10·10	10·70	0·15	0·03	22,200
1961-62	9·48	6·14	2·05	0·65	7,808
1962-63	11·11	8·24	19·15		125,145
1963-64	6·00	10·95	3·16	0·16	21,488
1964-65	19·04	3·01	4·08	—	97,702
1965-66	7·27	3·87	1·53	0·28	37,106

(*Source* : Deputy Commissioner, Ludhiana)

The peculiar climatic conditions necessitate irrigation by artificial means for sowing, growing and proper maturing of crops or increasing their yields.

Irrigation Facilities. For increased artificial supply of water for irrigation, recourse must be had to river water through canals—known as major irrigation, and sub-soil water through wells (percolation), pumping sets and tubewells—known as minor irrigation.

The following table shows the area irrigated through different sources during the years 1950-51, 1955-56 and 1960-61 to 1965-66 :—

Net Area under Irrigation in Ludhiana District

Source	(Thousand Acres)						(Thousand Hectacres)	
	1950-51	1955-56	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
Government canals	70	86	60	62	61	62	26	26·9
Tanks	—	—	—	—	—	—	—	—

(*contd.*)

Source	1950-51	1955-56	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
Wells	319	393	288	263	271	260	127	123·1
Other sources	—	—	—	—	—	107	5	9·9
Total	389	479	348	325	332	429	158	159·9

(Statistical Abstracts of Punjab, 1963 to 1966 ; and Statistical Abstract of District Ludhiana, 1963, P. 56)

In 1965-66, the area irrigated by wells and canals worked out to be 40.49 and 8.35 per cent, respectively, of the net area sown. The major source of irrigation, therefore, comprised wells, tubewells and pumping-sets. Of the gross irrigated area, some 40.49 per cent was thus irrigated from sub soil water.

Canal irrigation is not very popular among the cultivators in the district due to the fact that the canal water supply is generally inadequate and irregular. As such it does not help them in increasing the cropping intensity of their land. Of the four branches of the Sirhind Canal, which serves the district, the Sidhwan Branch is a seasonal one. Moreover, due to rise in water level, the farmers prefer to utilise sub soil water to avoid its further rise as a result of canal irrigation.

Water at will is considered to be the most important pre-requisite for increasing agricultural production. During 1961-62 to 1966-67, about a crore of rupees were advanced as minor irrigation loans to the farmers in the district.

Wells.—The wells are the principal source of irrigation in the district, and no less than 82.5 per cent of the total irrigated area is served by them. Initially *dhinklis* and *charsas* were used to lift subsoil water. They were substituted by wooden Persian-wheels with earthen buckets; but now the entire outfit is of iron.[1] Tubewells and pumping-sets have been introduced in the post-Independence period. The numbers of percolation wells, tubewells and pumping-sets installed during the first three Five-Year Plans are given in the following table :—

Wells, Tubewells and Pumping-sets installed in Ludhiana District during three Five-Year Plans (1951-52 to 1965-66)

	First Five Year Plan (1951-56)	Second Five-Year Plan (1956-61)	Third Five-Year Plan (1961-66)					
			1961-62	1962-63	1963-64	1964-65	1965-66	Total 1961-66
Wells (percolation)	1395	1,129	411	295	338	284	110	1,438
Tubewells	174	555	97	94	70	379	26	666
Pumping-sets	807	1,079	500	556	413	565	691	2,725
Loans advanced for the above minor irrigation works (Rs.)			23,15,000	21,20,000	14,00,000	23,93,000	20,00,000	1,02,28,000

(*Source* : District Agricultural Officer, Ludhiana; Ludhiana District Census Handbook, 1961, p. 17)

[1]For a description of *dhinkli*, *charsa* and wells reference may be made to : Ludhiana District Gazetteer, 1904, pp. 142-45.

Wells (percolation).—Well irrigation has been an important source of artificial irrigation. It is mainly done by private enterprise. The State only encourages their construction by agricultural loans and by liberal rules in the matter of land revenue assessment.

The Government grants *taccavi* loans up to the extent of Rs 2,000 for sinking a new well and Rs 500 for repairing old and abandoned ones. The supply of cement at controlled rates and bricks through approved kiln contractors is also arranged.

The number of wells sunk/repaired during 1957-66 is given below :

Year ending *rabi*	*New wells sunk*		*Old wells repaired*	
	From *taccavi* advanced	At private expense	From *taccavi* advanced	At private expense
1957	172	223	—	22
1958	177	140	—	19
1959	206	101	—	9
1960	266	115	4	16
1961	237	74	3	7
1962	305	92	1	16
1963	164	161	5	6
1964	134	126	3	8
1965	98	104	5	9
1966	37	82	—	—

सत्यमेव जयते

(*Source* : Deputy Commissioner, Ludhiana)

Tubewells and pumping-sets[2].—India is a land of villages and its economy is agriculture-oriented. Rains are often scanty and other means of irrigation not always and everywhere available. The only way to solve the

[2]In case of pumping-sets, water is lifted from the open wells, tanks, reservoirs, canals, etc., with the help of centrifugal pumps worked with diesel engine or electric pump. In the case of tubewells, the sub-soil water is drawn with the help of electric motor or oil engine through an iron tube bored direct into the soil.

problem of irrigation is to sink tube wells or instal pumping-sets and to bring out water from below the surface of the earth with the power of electricity or diesel oil. This gives the farmer full control over water supply which he can utilise as and when needed.

The subsoil water all over the district is sufficient and suitable for irrigation purposes. Tubewells and pumping-sets[3] have become quite popular. The number of tubewells and pumping-sets, thus, increased from 614 and 1,651, respectively, in 1960-61, to 2,076 and 5,145, respectively, in 1965-66, as detailed below :

Year	*Tubewells*		*Pumping-sets*	
	Sunk during the year	Upto date total	Installed during the year	Up to date total
1960-61	95	614	118	1,651
1961-62	284	898	399	2,050
1962-63	89	987	332	2,282
1963-64	284	1,271	531	2,813
1964-65	405	1,676	1,111	3,924
1965-66	400	2,076	1,221	5,145

(*Source* : District Agricultural Officer, Ludhiana)

Canals.—Next in importance to wells come the canals, as a source of irrigation in the district, which is served by two canals : the Sirhind Canal, which offtakes from the river Satluj at Ropar Headworks, and the Bhakra Main Line, known as the Nangal Hydel Channel for the first 64 kilometres, which offtakes from the Satluj at Nangal Headworks.

[3]In Ludhiana district, the existing open percolation wells are being fitted with pumping-sets and the water supply in the wells is supplemented by further boring the well. In areas, where percolation wells do not exist, tubewells are being installed.

The locally manufactured materials, such as pipes made of iron sheets, strainers made of *munj ban* have considerably reduced the cost of tubewells. To avoid wastage of water in sandy uneven lands, the boring is done at different places and these are worked with one mobile oil engine. Thus, a cultivator having one engine may control more than one pump in his scattered fields.

The Sirhind Canal System serves the district through its four branches ; the Abohar Branch, Bhatinda Branch, Patiala Branch (generally known as Patiala Feeder) and Sidhwan Branch. The Sirhind Canal tails off at 63 kilometres at the Buwani Regulator (about 2½ kilometres downstream of the Doraha Bridge in sub-tahsil Payal), from where it is trifurcated. From the left side offtakes the Patiala Branch (to the south-east), from the right side offtakes the Sidhwan Branch (towards the west) and on the front side (to the west) goes the Combined Branch.

The Combined Branch, after running for about 3½ kilometres, bifurcates into two branches, viz., the Abohar Branch and Bhatinda Branch, at Manpur Regulator, situated in sub-tahsil Payal.

The Patiala Branch is under the charge of the Patiala Circle, Irrigation Branch, Patiala. The Sidhwan Branch is under the jurisdiction of the Ferozepore Canal Circle, Ferozepore. The Abohar Branch and the Bhatinda Branch are under the charge of the Sirhind Canal Circle, Ludhiana.

The Bhatinda Branch caters to a small portion in the south of Ludhiana tahsil and the Patiala Branch to a small portion of sub-tahsil Payal. The rest of the Ludhiana tahsil and the Jagraon tahsil are irrigated by the Sidhwan Branch and Abohar Branch.

Sirhind Canal.—Canal irrigation in the district started with the opening of the Sirhind Canal on November 24, 1882. It takes off from the river Satluj at Ropar Headworks. The Canal Main Line enters the district at 27 kilometres near Bahlolpur in Samrala tahsil and runs in a westerly direction until it reaches Buwani Regulator in Payal sub-tahsil of Ludhiana tahsil at 62⅞ kilometres.

Originally, the Main Line had a bed width of 60 metres and could carry a maximum supply of 8,000 cubic feet per second, with a depth of 3.45 metres. The canal has been remodelled to carry a discharge of 12,625 cubic feet per second during *kharif* season and 10,237 cubic feet per second during *rabi* season. Now its bed width is 69 metres and depth 4 metres. The bed width at Manpur Regulator is 66 metres. The remodelling was completed in 1953-54.

The Canal Main Line ends and trifurcates into three branches at Buwani, viz., Combined Branch to the west, Patiala Branch or Patiala Feeder to the south-east and the Sidhwan Branch (above the Combined Branch) towards the west.

The Combined Branch has a bed width of 40.8 metres and a depth of 3.15 metres, and can carry a full supply of 5,461 cubic feet per second. After a

course of two miles, it bifurcates at Manpur Regulator into two branches : the Abohar Branch and Bhatinda Branch.

(1) **Abohar Branch.**—The northern or Abohar Branch, originally constructed in 1883, has also been remodelled. It starts with a bed width of 48 metres, depth of 2.6 metres and a full supply of 4,824 cubic feet per second. This Branch has been reduced to carry a discharge of 2,803 cubic feet per second on account of the construction of the Sirhind Feeder Canal, which now irrigates the areas lying on its right side, previously irrigated from the Abohar Branch. The Abohar Branch runs for a distance of 62½ kilometres in Ludhiana and the remainder in Ferozepore and Bhatinda districts.

The area irrigated by the Abohar Branch in Ludhiana district is as under :

Area Irrigated by Abohar Branch of Sirhind Canal in Ludhiana District, 1961-62 to 1965-66

Year	Ludhiana tahsil (acres)	Jagraon tahsil (acres)	Samrala tahsil (acres)	Total (acres)
1961-62	32,601	61,349	—	93,950
1962-63	16,605	53,864	—	70,469
1963-64	18,654	54,834	—	73,488
1964-65	18,629	55,066	—	73,695
1965-66	19,464	55,770	—	75,234

(*Source* : Superintending Engineer, Sirhind Canal Circle, Ludhiana)

(2) **Bhatinda Branch .**—The Southern or Bhatinda Branch, originally constructed in 1882, has also been remodelled. It starts with a bed width of 40.5 metres, depth of 1.6 metres and a full supply of 2,787 cubic feet per second. It has a length of 160 kilometres of which only the first 19 kilometres are in the Ludhiana district. From 54.4 kilometres of the Main Line to 3.2 kilometres on the Abohar Branch and 9.6 on the Bhatinda Branch, the canal is in the Payal sub-tahsil of Ludhiana tahsil. Thereafter, passing through Sangrur district, the Bhatinda Branch ends in Bhatinda district from where its two distributaries issue into Ferozepore district.

The area irrigated by the Abohar Branch in Ludhiana district is as under :

Area Irrigated by Bhatinda Branch of Sirhind Canal in Ludhiana District, 1961-62 to 1965-66

Year	Ludhiana tahsil (acres)	Jagraon tahsil (acres)	Samrala tahsil (acres)	Total (acres)
1961-62	2,106	14,190	—	16,296
1962-63	9,942	12,790	—	22,732
1963-64	11,444	13,386		24,830
1964-65	10,867	13,552	—	24,419
1965-66	11,421	14,104	—	25,525

(*Source* : Superintending Engineer, Sirhind Canal Circle, Ludhiana)

(3) **First Feeder.**—The First Feeder which was originally constructed in 1870 has not been remodelled so far. Its bed width is 39 metres, F.S. depth 2.38 metres and F.S. discharge 3,130 cs. at head. This channel offtakes from Sirhind Canal at Manpur Headworks and runs through sub-tahsil Payal of Ludhiana district for a distance of about 27.26 kilometres, whereafter it enters Patiala district. The entire maintenance of this channel is being done by this Division.

The area irrigated by the First Feeder in Ludhiana district is as under :

Area Irrigated by First Feeder of Sirhind Canal in Ludhiana District, 1961-62 to 1965-66

Year	Tahsil Ludhiana (acres)	Tahsil Jagraon (acres)	Tahsil Samrala (acres)	Total (acres)
1961-62	140·00	—	—	140·00
1962-63	130·11	—	—	130·11
1963-64	809·73	—	—	809·73
1964-65	938·69	—	—	938·69
1965-66	997·66	—	—	997·66

(*Source* : Executive Engineer, Nabha Division, Irrigation Branch, Patiala)

(4) **Sidhwan Branch.**—Opened in 1951-52, the Sidhwan Branch offtakes from the tail of the Sirhind Canal from Manpur Headworks, at R.D. 1,94,444 feet. It starts with a bed width of 27.6 metres, depth of 2 metres and a full supply of 1,612 cubic feet per second. The total length of this Branch is 2,88,760 feet, out of which 2,20,750 feet fall in Ludhiana district and the rest in Ferozepore district. It is a seasonal canal. It irrigates the area of Ludhiana tahsil of Ludhiana district and Moga and Zira tahsils of Ferozepore district.

The area irrigated by the Sidhwan Branch in Ludhiana district is as under :

Area Irrigated by Sidhwan Branch of Sirhind Canal in Ludhiana District, 1961-62 to 1965-66

Year	Ludhiana tahsil (acres)	Jagraon tahsil (acres)	Samrala tahsil (acres)	Total (acres)
1961-62	7,245	1,450	—	8,695
1962-63	6,820	1,483	—	8,303
1963-64	7,963	2,014	—	9,977
1964-65	7,261	2,652	—	9,913
1965-66	7,658	3,036	—	10,694

(*Source* : Executive Engineer, Sidhwan Division, Sirhind Canal, Ludhiana)

Bhakra Main Line.—This channel takes off from the Nangal Hydel Channel near Ropar. It passes through the districts of Ropar and Patiala. No reach of the Bhakra Main Line falls in district Ludhiana, but irrigation to its area is provided through two distributaries, viz. Samrala Distributary and Khanna Distributary. The area irrigated by the Khanna Distributary system and Samrala Major Distributary during the period 1961-62 to 1965-66 is as under:

Area Irrigated by Bhakra Main Line in Ludhiana District, 1961-62 to 1965-66

Year	Ludhiana tahsil (acres)	Jagraon tahsil (acres)	Samrala tahsil (acres)	Total (acres)
1961-62	—	—	23,292	23,292
1962-63	—	—	21,156	21,156
1963-64	669	--	19,690	20,359
1964-65	498	—	17,094	17,592
1965-66	313	—	18,412	18,725

(*Source* : Superintending Engineer, Bhakra Main Line Circle, Patiala.)

(c) Agriculture including Horticulture

(i) **Set-up of the Agriculture Department.**—The Department is represented in the district by the District Agricultural Officer, Ludhiana, who is under the administrative control of the Deputy Director of Agriculture, Agricultural Circle, Jullundur. The District Agricultural Officer, Ludhiana, is assisted (as on November 1, 1966) by 2 Plant Protection Inspectors, 3 Implement Inspectors, 1 Horticulture Inspector, 10 Agricultural Inspectors, 11 Agricultural Sub-Inspectors and 21 Beldars besides the ministerial staff,

The work of development of agriculture in the district started in 1923 when a wholetime Agricultural Assistant was posted here. To begin with, the activities comprised propaganda work and educating the farmers regarding adoption of improved agricultural practices like sowing of crops by *pora* and *kera*, use of furrow turning ploughs, sowing of improved seeds, sowing of crops in lines, use of compost and green manuring, etc. In 1927, an Agricultural Demonstration Farm was set up in Ludhiana.

The Agriculture Department guides the farmers in the lay out of gardens, extension of new orchards, problems relating to the maintenance and establishment of gardens and nurseries, control of various pests and diseases affecting agricultural crops and gardens, management and procurement of fertilizers and good seeds, and lays out demonstration plots to bring home to the cultivators the superiority of strains recommended for the district. The Agricultural Inspectors educate the farmers in their block areas on matters relating to improved seeds, fertilizers, improved agricultural implements and recommend agricultural practices through laying out of demonstration plots, organising rural fairs, distribution of literature, etc.

The Government takes keen interest in increasing agricultural production by popularising improved agricultural practices and implements. Subsidies are given for the purchase of superphosphate fertilizer at the rate of 25 per cent, insecticides at the rate of 50 per cent and plant protection equipment, such as dusting machines and spray pumps, at the rate of 50 per cent. Loans and subsidies are also advanced for the repair of old wells and construction of new ones and installation of tubewells and pumping-sets under the development of irrigation programmes. Besides, *taccavi* loans are advanced for the development of horticulture at the rate of Rs. 300 per acre of plantation. The loans for the reclamation of land are also given.

The State assistance to agriculture, which comprises *taccavi* loans, for reclamation, subsidies, relief, etc., advanced in the district during the period from 1956-57 to 1965-66, is given in the following statement :—

सत्यमेव जयते

Loans/Subsidies Advanced to Agriculturists in Ludhiana District, 1956-57 to 1965-66

(Rupees)

Loans/Subsidies	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
Loans										
1. Sinking of percolation wells	—	80,000	40,000	1,31,000	1,86,000	10,000	25,80,000	1,56,500	2,27,200	—
2. Sinking of tubewells	—	18,000	49,000	1,08,000	54,000	8,95,000	20,00,000	5,66,750	13,23,750	9,80,000
3. Installation of pumping-sets	—	25,000	50,000	86,000	60,000	20,00,000	87,000	4,58,583	14,74,250	10,13,500
4. *Taccavi* loan for fertilizers	4,78,502	3,64,254	7,41,104	11,56,176	1,73,014	18,27,188	20,14,960	56,76,765	80,39,316	1,44,67,691
5. *Taccavi* loan of purchase of tractors	—	—	8,19,000	60,000	90,000	1,15,000	2,55,000	—	—	—
6. *Taccavi* loan for development of horticulture	—	7,88,000	2,76,000	35,000	19,800	30,000	18,000	—	24,000	15,000
7. *Taccavi* loan for purchase of sugarcane seed	—	—	—	—	—	—	—	—	—	—
8. *Taccavi* loan under the Land Improvement Loans Act XIX of 1883 (Ordinary)	—	1,000	1,50,000	—	—	40,000	3,55,000	—	—	10,000
9. *Taccavi* loan under Agriculturists Loans Act XII of 1884 (Ordinary)	20,000	7,000	6,65,000	75,000	1,10,000	1,00,800	3,79,600	1,13,000	3,30,000	30,000
Subsidies										
1. Subsidy for green manuring Rs @ 2.50 per acre	—	—	—	—	—	—	—	—	—	—
Subsidy for purchase of fruit plants	—	—	—	—	—	—	—	—	—	—

(*Source* : District Agricultural Officer, Ludhiana)

(ii) Intensive Agricultural District Programme.—During the past two decades, the country has suffered from chronic shortage of agricultural produce, especially foodgrains. The problem of producing enough to feed a rapidly growing population and also to meet the requirements of raw materials for industries based on agriculture, has caused great concern. There have been a number of agricultural development schemes like 'Grow More Food Campaign, '*Rabi* and *Kharif* Campaigns', etc., to increase the food production on all-India basis. The programme has, however, not been successful, as there has not been any concerted approach in terms of technical know-how, supplies of inputs, credit and marketing facilities, etc., with the result that no significant headway could be made in increasing the agricultural production. In the First and Second Five-Year Plans, emphasis was laid on increasing the agricultural production, but the rate of progress was much below expectation.

To study the nation's food problem, the Government of India invited an Agricultural Production Team sponsored by the Ford Foundation of U.S.A. in January, 1959. This team was followed by another high powered team of Agricultural Experts headed by Dr. Sherman E. Johnson, during October, 1959. It visited Ludhiana district from the 18th to 20th October, 1959.

On the recommendations of the Ford Foundation Study Teams the Government of India started a 'Pilot Project' in seven selected districts of the different States. One of the projects was allotted to the Punjab State which launched the programme in Ludhiana district. The project was designed to concentrate efforts in intensifying agricultural production through Intensive Agricultural District Programme, popularly known as the 'Package Programme', in which all the factors that were likely to contribute significantly towards the rapid increase in food production were combined into this very programme. The programme, thus, aimed at an integrated intensive approach to the problems of agricultural production and sought to achieve increase in the level of agricultural production through a concentration of financial, technical, extension and administrative resources.

The project staff started assembling in September, 1960 and by January, 1961, practically all the staff members were in position. The project was, however, launched in full swing from *kharif* 1961, after the field staff was fully initiated and trained.

The I.A.D. Programme is under the charge of a Pilot Project Officer, who is assisted by an Assistant Project Officer, and 6 Subject Matter Specialists representing various fields of agricultural sciences, such as agronomy, animal husbandry, plant protection, farm management, soil science and horticulture.

A Deputy Registrar, Co-operative Societies, Package Programme, assisted by additional field staff, has also been provided for the development of co-operative credit movement in the district. In each of the ten blocks, there are 5 Agricultural Extension Officers and 15 Village Level Workers to educate the farmers in the improved techniques of farming. Special staff has been provided under a Statistical Officer for the Benchmark and Assessment Survey for periodical assessment of the achievements made under the programme. A Rural Sociologist assisted by a Senior Socio-Economic Investigator, 6 Research Investigators besides other staff, has been appointed to study the impact of the programme on social and economic condition of the people. A Seed Development Officer, with 3 Seed Development Inspectors, has also been appointed. Other features of the programme include an Information Programme under a District Agricultural Information Officer and a Water Use and Management section under a Subject Matter Specialist (W.U.).

As a result of the implementation of the 'Package Programme', there has been marked improvement in the agricultural production of the district during the five years from 1961-62 to 1965-66. Ludhiana district stands at the top among all the seven districts in the country placed under the Programme. A veritable revolution in agriculture is taking place in the district where the farmers are bettering production records and raising the gross income from major crops with each successive year[4]. The district has already achieved a major break through by the adoption of improved production practices with modern techniques. High yielding varieties of Mexican wheat and hybrid maize have fired the imagination of the farmers. Large areas are being covered by these varieties and block officials are finding it difficult to cope with the increasing demands for the new seeds and chemical fertilizers. Achievements made in increasing the production of maize, groundnut, cotton, wheat, wheat plus gram (mixture), and gram are shown in the statement given on the next page. Wheat claimed about 45 per cent of the total cropped area of the district in 1965-66 and the average yield increased from 16.9 maunds per acre in 1960-61, the year before the introduction of the Intensive Agricultural District Programme, to 24.2 maunds per acre in 1965-66, showing an increase

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4. A study made in the Dhaiya area of this I.A.D.P. district for exploring the possibilities of increasing farm income through planning on mechanised holdings, has "clearly demonstrated that farm income could be increased substantially by adopting new varieties, production techniques, farming practices and adjustment in the areas under different crops."

The Study conducted by Shri H.S. Bal, Assistant Extension Specialist (Farm Management, Patiala, and Dr. A.S. Kahlon, Dean of the College of Basic Sciences and Humanities, Punjab Agricultural University, Ludhiana, was aimed at examining the existing pattern of using resources on selected mechanised farm organisations and developing optimum farm organisations with a view to maximising farm income.

of 43.2 per cent. The total production of foodgrains, viz., maize, wheat, wheat plus gram, and gram, increased from 71.6 lakh maunds in 1960-61 to 135.7 lakh maunds in 1965-66, showing an increase of 89.5 per cent over the pre-package year (1960-61). The estimated total gross income of major crops, viz., maize, cotton, groundnut, wheat and gram, increased from 136.4 million rupees in 1960-61 to 407.0 million rupees in 1965-66 showing an increase of 198.4 per cent over the pre-package year.

Progress of Intensive Agricultural District Programme, Ludhiana 1961-62 to 1965-66

Crop Area/Production	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
1	2	3	4	5	6	7
Maize						
Area (acres) ..	96,120	96,610	1,00,016,	1,10,028	1,18,053	1,33,380
Average yield per acre (mds.) ..	15.0	21.4	12.4	22.7	16.0	27.1
Total Production (mds.)	14,42,105	20,70,861	12,37,798	24,97,636	18,88,848	36,09,263
Groundnut						
Area (acres) ..	66,897	61,078	73,709	1,06,394	1,30,665	1,32,392
Average yield per acre (mds.) ..	10.1	13.5	11.7	14.3	16.4	16.1
Total production (mds.)	6,75,660	8,24,553	8,62,395	15,21,434	21,42,906	21,31,511
Cotton						
Area (acres) ..	63,786	62,929	73,907	82,874	81,417	86,203
Average yield per acre (mds.) ..	8.05	9.3	4.9	9.5	6.8	9.0
Total production (mds.)	5,62,483	5,99,843	3,63,632	7,87,303	5,53,636	7,72,379
Wheat						
Area (acres) ..	1,98,896	2,10,711	2,30,168	2,75,491	3,12,495	3,38,935
Average yield per acre (mds.) ..	16.9	21.1	19.6	23.7	25.1	24.2
Total production (mds.) from pure wheat as well as wheat plus gram (mixture)	45,40,582	58,24,372	57,27,654	76,39,202	91,72,741	90,49,782

Crop Area/Production	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
1	2	3	4	5	6	7
Wheat plus gram (mixture)						
Area (acres) ..	1,57,442	1,45,620	1,27,339	1,18,092	1,18,844	85,508
Average yield per acre (mds.) ..	12.1	15.4	15.6	15.4	18.0	16.8
Total production (mds.)						
Wheat ..	11,79,240	13,80,478	12,11,768	11,10,064	13,32,241	8,47,555
Gram ..	7,32,105	8,54,789	7,74,720	7,08,552	8,04,574	5,88,979
Gram						
Area (acres) ..	43,779	49,685	39,144	38,832	31,062	25,364
Average yield per acre (mds.) ..	10.2	10.7	10.8	9.6	13.6	12.7
Total production (mds.) ..	11,78,651	13,85,922	11,97,083	10,81,339	12,26,085	9,11,102

(*Assessment and Evaluation of Intensive Agricultural District Programme, Ludhiana*, 1960-61 to 1965-66). (Cycle-styled copy : *Ludhiana*, September, 1966).

(iii) **Soils, Climate and Crops.**—The climate and soils have direct bearing on the cropping pattern of an area. The crops suitable to a particular type of soil and climate are sown there. Recently, there has been a new trend to sow better yielding crops and ignore those less paying. As a result of increase in waterlogging and more irrigation facilities, in Ludhiana district, the cultivators are putting less area under the less paying crops and more area under groundnut and paddy crops. Similarly, area under the gram crop has decreased while that under wheat has increased.

Soils.—The district forms part of the western Indo-Gangetic plain. It is a flat alluvial plain, drained by the river Satluj and some of its tributaries. The soils have been formed from material brought down the Shiwalik and Himalayan ranges and, geologically speaking, they are of recent origin and may be called as young soils. The actual depth of the material has not been determined ; but from the complete absence of out-croppings of native rock anywhere in the district, it may be said that the parent material of the soils is of great depth.

Every type of soil from hard clay to the lightest sand is found here. The district can be divided into three physiographic regions, viz., (1) *Bet* (river land frequently flooded), (2) *Dhaiya Neecha* (lower upland), and (3) *Dhaiya Ucha* (higher upland).

The predominant characteristics that help to classify these soils are the texture of the surface soil, rainfall, depth of water-table, kind and quality of water soluble salts PH depth[5] of deposition of lime concretions and topography. Taking these factors into consideration, the soils of each of the above-mentioned three regions are classified as under :

(1) *Bet* or **floodplain.**—This area lies between a small and perennial stream called the Buddha Nala and the river Satluj, and is about 96 kilometres in length. The width varies from about 0.8 kilometres to about 10 kilometres. The soil is light in texture, i.e., sandy loam and loamy sand. The depth of water-table fluctuates between summer and winter season from 4′ to 8′ in Samrala tahsil and 6′ to 10′ in Jagraon and Ludhiana tehsils. Salt incrustration is visible at the top, whereas lime concretion is absent in subsoil. The PH value varies from 7.5 to 9.5 showing the problem of alkalinity in the area. At some places sand dunes are met with and land is of rolling topography resulting in soil erosion. Most of the *bet* area is subject to floods. Waterlogging has also affected some places near the Satluj and the Budha Nala.

(2) *Dhaiya Neecha* **or lower upland.**—This tract lies between the Budha Nala on the north and Ferozepore- Chandigarh Road on the south. Its approximate area is 1,61,819 acres. The soil is very light and sandy in texture but gets heavier in the sub-soil. Sand dunes are often found in this area. Water-table varies from 20′ to 30′. PH value varies from 7 to 8.75. The soils are lower in organic matter and available phosphorus, which results in low fertility. In Jagraon tahsil, loamy and sandy loam soils are also present.

(3) *Dhaiya Ucha* **or higher upland.**—This area lies to the south of the Ferozepore-Chandigarh Road and measures approximately 5,26,541 acres. The soil is of heavier texture and more fertile. Sand dunes and alkaline patches are often found in Ludhiana and Jagraon tahsils and lime concretion layer is present at 3′ to 6′ below surface. The sub-soil is invariably heavier than the surface soil. PH value ranges from 8.5 to 9.2. Water-table varies from 20′ to 25′ in Samrala tahsil and 10′ to 15′ in Jagraon and Ludhiana tahsils.

In general, the soils of the district are affected with salinity and alkalinity, floods, soil erosion, defective soil structure, and soil fertility, which are dealt with in detail hereunder.

Salinity and alkalinity.—In the south-west of Samrala tahsil, near village Kamma, in the villages of Nasrali, Isru and Khurd, and in the *bet* areas of all the three tahsils, salinity and alkalinity is a serious problem. For the reclamation of the soils leaching, green manuring with *Dhaincha*, application of gypsum

5. PH is a logarithmic scale of acidity or alkalinity of acqueous solutions.

and fertilizers, rice cultivation, and ample quantity of manure and fertilizers are very essential. In some of the saline and alkaline soils of the *bet* areas, where water-table is high due to frequent floods, anti-flood measures and proper drainage need be arranged before any reclamation work can be successful.

Floods.—In the *bet* area of all the three tahsils, floods pose a serious problem. For successful cropping in these areas, measures like bunds, *wat* bunds, planting of trees, etc., may be of some help. Rice and sugarcane should replace maize and cotton in such areas.

Soil erosion.—It takes place both through water and wind. Sloping lands on the border of *Dhaiya* and *bet* are subject to water erosion. The loss of surface soil may be checked by *wat* bunds, contour bunding, and growing of cover crops during rainy seasons.

The wind erosion is mostly confined to very light texture soils lying barren. Sand dunes are commonly seen in the lower and higher uplands (*Dhaiya*) areas of Samrala tahsil and belts, on either side of the Ludhiana-Ferozepore Road and lower upland (*Dhaiya*) of Jagraon tahsil. These are shifting their position, thereby causing serious loss to the standing crops and damaging adjoining lands. These areas need be brought under irrigation, planting of wind breakers, and seeding with grasses and legumes. Green manuring is also beneficial for these areas.

Defective soil structure.—In some soil series, there is the problem of bad soil structure. It can be seen in the belt near village Dakha, on either side of the Ferozepore-Ludhiana Road in tahsil Ludhiana. Deep ploughing, sub-soiling, green manuring with deep rooted crops and use of gypsum are some of the measures which might improve the soil structure and increase the yields in these soils.

Soil fertility.—The soils of the district are basically deficient in organic matter and nitrogen, particularly the sandy and loamy sand soils. Responses to phosphorus are also obtained when applied in addition to nitrogenous fertilizers.

Major and Subsidiary Crops.—There are two main harvests in a year in the district, viz., *kharif* and *rabi*, locally named as *sawni* and *hari*. The former is the summer season harvest and the latter the winter season harvest. There is another harvest which is assessed along with *kharif* and sometimes with *rabi*. The harvest assessed with rabi is called in the village papers as *zaid-rabi* and that assessed with kharif as *zaid-kharif*. It includes mostly vegetable and fodder crops.

The major *kharif* crops of the district are maize, groundnut, cotton and sugarcane, while the minor or subsidiary *kharif* crops are rice, chillies, pulses

(mash, *masoor*, *moong* and *moth*), sesamum and *kharif* fodders (*chari*, *guara*, *bajra*, *etc.*). The major *rabi* crops are wheat and gram, and the minor *rabi* crops are barley, potatoes, oilseeds and some winter vegetables. Groundnut is the major cash crop of the district. Vegetables are generally cultivated in the vicinity of towns where these are in comparatively greater demand.

The major *kharif* crops are maize, groundnut, cotton and sugarcane. Maize forms the most important food crop of *kharif* season in the district. It is the staple food in winter months of the people in general, particularly of the farmers with inadequate supplies of wheat. It is sown in the month of July and its harvesting takes place in October. It is sown mostly under irrigated conditions. Proper drainage facilities are, however, necessary. The crop is sown on the best soil with liberal quantity of compost and artificial fertilizers. The introduction of hybrid maize has created greater potential for agricultural production. The variety of foodgrain is gaining popularity due to its better performances. The production of the crop has considerably increased from 18 thousand tons in 1950-51 to 134 thousand tons in 1965-66. Similarly, the area under it has increased from 70 thousand acres in 1950-51 to 132.5 thousand acres in 1965-66.

Groundnut occupies the second position in terms of acreage among *kharif* crops and is the most important cash crop of the district. It is usually grown in poor sandy soils where irrigation facilities are hardly available. A fairly large area of this type of soils is available in the district. Irrigated groundnut is also being sown. Under the package programme, therefore, greater emphasis has been laid on the increase of the area and the yield per acre by introduction and adoption of package of practices for fertilizers, improved agricultural practices and better irrigation facilities. The crop has responded well to these practices. The area and production of groundnut has increased from 53.6 thousand acres and 15.2 thousand tons in 1950-51 to 132.9 thousand acres and 78.8 thousand tons in 1965-66, respectively. The production in the district in the same year was the highest in the State. The crop is sown in July and is ready for harvesting in October.

Cotton occupies the third position in terms of acreage among the *kharif* crops and is one of the important cash crops of the district[6]. It requires good soil. *Desi* cotton is sown with the onset of monsoon, while American variety of cotton is sown during April and late sowing may continue up to the end of the first week of May. Picking of cotton starts from the end of August and the crop is over by the middle of November. The area under American cotton is decreasing due to excessive rains and flood

6. During 1967-68, the Cotton Package Programme was extended to the sub-divisions of Samrala and Ludhiana of the district.

waterlogging, while the area under *desi* cotton is increasing. The area under American cotton has decreased from 66 thousand acres in 1956-57 to 29.4 thousand acres in 1965-66. On the other hand, the area under *desi* cotton has increased from 12 thousand acres in 1956-57 to 46.7 thousand acres in 1965-66.

Next to cotton, sugarcane, is also an important *kharif* crop in the district. Its sowing starts from the middle of February and continues till the end of March. It requires very rich and well-prepared soil. The area under the crop has increased from 18 thousand acres in 1950-51 to 40 thousand acres in 1965-66.

Rice is a minor *kharif* crop of the district. It is generally raised from the nursery which is sown in the month of June. The seedlings, when 5-6 weeks old, are transplanted in the month of July. Generally, *Jhona* 349 variety is sown in the district. The area covered by it and production have increased from one thousand acres and one thousand tons in 1950-51 to 12.6 thousand acres and 4 thousand tons in 1965-66, respectively.

The principal *rabi* foodgrain crops are wheat and gram. Wheat is the staple diet of the Punjabis throughout the year. Wheat covered about 45 per cent of the cultivated area in the district in 1965-66. The promoters of the Intensive Agricutural District Programme (introduced in 1961-62) while selecting Ludhiana, had mainly the wheat crop in view. The crop, therefore, received special attention of the extension specialists working on the programme. The area sown with improved varieties of wheat seed in the district increased from 76.7 per cent during 1960-61 to 89.1 per cent during 1963-64. It became 100 per cent during 1965-66. The improved strains were C-273 and C-306 for normal sowing and C-286 for late sowing. During 1965-66 the Maxican varieties like Lerma Roja and PV-18 were introduced and gained popularity as the high yielding varieties[7]. The area under wheat has increased from 218 thousand acres in 1950-51 and 279 thousand acres in 1960-61 to 374.9 thousand acres in 1965-66. The production has also jumped from 102 thousand tons in 1950-51 and 165 thousand tons in 1960-61 to 280 thousand tons in 1965-66. The average yield of wheat in Ludhiana district compares very favourably with the best wheat growing countries of the world. The crop is sown from the middle of

7. The current process of developing high yielding dwarf wheat varieties had started in 1963-64, when some new lines were developed out of the wheat lines received from Mexico. The process has resulted in the release of several new varieties including the well known PV-18 and Kalyan 227 developed by Punjab Agricultural University, Ludhiana.

October up to the middle of November, though late sowing continues up to the middle of December. It is ready for harvesting from the middle of April.

Gram is grown both under *barani* and irrigated conditions. The crop being very sensitive to natural extremities does not suit the cultivators economically. It is thus mostly raised under the rainfed conditions. With increase in minor irrigation facilities, cultivators have preferred wheat, a better paying and more sure crop, to gram. The area under the crop and its production have decreased from 143 thousand acres and 37 thousand tons in 1950-51 to 69.4 thousand acres and 20 thousand tons in 1965-66, respectively. The area under gram was less than half per cent of the cultivated area in the district during 1965-66. Gram cultivation in the district is consumption oriented rather than market oriented.

Barley is a minor *rabi* crop. It is sown during October-November and harvested in April. It is generally sown on poor soil where wheat does not flourish. During 1965-66, the area under the crop was 21.7 thousand acres and the production was 11 thousand tons.

Besides groundnut, the other oilseeds grown in the district are rape and mustard, sesamum and linseed. Rapeseed is usually sown mixed with wheat and gram. It is sown in rows in wheat fields or on the borders of fields in irrigated areas and also in rows in gram fields under unirrigated conditions. The other oilseeds are generally grown on poor soils and mixed with other crops. During 1965-66, the total area under rape and mustard, sesamum and linseed was 3.5, 0.2 and 1.0 thousand acres, respectively; and the production during the same period was 0.7, 0.04 and 0.3 thousand metric tons, respectively.

Vegetables.—To augment the production of vegetables in the district, a Vegetable Development Officer has been posted at Ludhiana besides an Agricultural Inspector (Vegetables) to guide the growers regarding vegetables growing and for making necessary arrangements for seed supplies, etc.

The climate of the district, being moderate, is quite suitable for growing vegetables, viz., potato, tomato, peas, (*bhindi*) okra, carrot, raddish, turnips, cabbage, cauliflower, spinach, brinjal, onion, chillies, etc. Previously, vegetables were mostly grown around cities and towns, but now these have been taken up by growers in the suburban areas as well.

The vegetables staff, in collaboration with the Intensive Agricultural District Programme staff, gives technical guidance to the vegetable growers in the district. Seeds of various improved varieties are supplied free of cost

for demonstration in kitchen gardens ; and, for growing on commercial scale, these seeds are arranged through the Punjab State Co-operative Vegetable Development Federation, College of Agriculture, Punjab, Ludhiana. The vegetable seed multiplication is encouraged through the private farmers interested in growing it under the technical guidance and supervision of the staff employed under the Vegetable Development Schemes. These seeds, thus produced by the Agriculture Department are purchased by the Vegetable Federation at premium and are resold to the vegetable growers. This arrangement has facilitated vegetable seed production besides augmenting farm income. For multiplication of potato seeds, however, a seed farm of 500 acres was established at Mattewara, about 24 killometers from Ludhiana. in September, 1967.

The area under different vegetables in the district was 2,497 hectares in 1965-66. The main vegetables grown in the district and their improved varieties recommended by the Department of Agriculture are as under :

Potato is the most important vegetable grown in the district. The improved varieties recommended are up-to-date, Kufri (Sandhori) and new white variety A-2708 (Kufri Chandermukhi) and Kufri (Shakti).

Tomato is one of the highly prized vegetables and a favourite with most people. Its important varieties are Best of All, Sionx Seed and Pusa Ruby, S-12, a new variety of tomato, has been approved for cultivation under high fertility and irrigated conditions.

The major value of onion lies in its flavour. The variety recommended is Punjab Selection.

The varieties of cauliflower, recommended for growing in the district, are Early Kumari for early season, Giant Snow Ball for main season and Snow Ball-16 for late season.

Cabbage is low in caloric value. The value is, however, higher than that of lettuce and cucumber. Minerals in cabbage rank higher than in tomato. Pride of India and Early Drum Head as early varieties and Late Drum Head as late variety are recommended in the district.

Carrot No. 29, raddish White 5 and Nadauni, and 4 White and 4 Red of turnips are good *desi* type varieties recommended. In the case of English types, Nantes and Golden Heart varieties of carrot are recommended. For raddish, Japanese white and white Icicle are the recommended varieties, and for turnips the English recommended varieties are Purple Top, Yellow Ball and Golden Ball.

Detailed particulars regarding the area under different crops, their total production and yield per acre in the district during the year 1950-51 (year before the introduction of the First Five-Year Plan), 1955-56 (last year of the First Five-Year Plan,) 1960-61 (last year of the Second Five-Year Plan), and 1961-62 to 1965-66 (period of the Third Five-Year Plan) are given in Appendices I, II and III, at the end of the chapter at pages 243 to 245.

Fruit Crops and Gardens.—With better realization of the important role that the fruits play in the human diet system, greater emphasis was laid in the Second and Third Five-Year Plan Projects for augmenting the production of fruits in the district.

Prior to 1958, the Horticultural Inspector, Moga (District Ferozepore), guided the growers of Ludhiana district in respect of fruit growing. This arrangement was inadequate to provide technical know-how for the new plantations and the maintenance of the old orchards. Under the scheme of Horticultural Development, a separate Horticultural Inspector for the district was, therefore, posted at Ludhiana in 1958. With the introduction of the Intensive Agriculture District Programme in Ludhiana district, a Subject Matter Specialist (Horticulture) was posted at Ludhiana in 1960-61.

The climate of the district is moderate as compared to other horticultural zones and is suitable for growing various fruit plants, viz., *malta*, *santra*, sweet lime, *kaghzi* lime, mango, guava, peach, plum, pear, papaya, grape and jujube. Spring and monsoon are the two favourable seasons for the plantation of fruit plants. The monsoon season is most suitable for plantation of the evergreen fruit plants and the spring for the deciduous ones.

The horticulture development staff, in collaboration with the Intensive Agricultural District Programme staff, is rendering technical guidance and assistance to the fruit growers in the district. The growers have now switched over to the cultivation of approved varieties of different fruits. In Samrala tahsil, where there are a good number of old seedling mango orchards, the growers have now taken up the plantation of grafted mangoes. Due to the adequate distribution of loans under minor irrigation programme, the growers have installed their own tube-wells and pumping-sets, which in turn have increased irrigation facilities so vital for fruit growing. Long term loans at Rs 300 per acre, advanced to fruit growers for planting new orchards, have gone a long way in increasing the area under fruit orchards. The loans advanced for

the establishment of new orchards, from 1957-58 to 1965-66, are as under:

Year		Amount of loan advanced
		Rs.
1957-58	..	70,000
1958-59	..	60,000
1959-60	..	35,000
1960-61	..	18,400
1961-62	..	30,000
1962-63	..	15,300
1963-64	..	10,300
1964-65	..	3,300
1965-66	..	..

To encourage grape cultivation in the district, loans up to Rs 3,000 per acre are advanced. The total amount of loans advanced in this respect during 1963-64 and 1964-65 was Rs 72,000.

The area under fruit orchards in the district, during the decade and a half, from 1950-51 to 1965-66, has been as under:

Year		Area (acres)
1950 to 1955	..	790
1960-61	..	820
1961-62	..	947
1962-63	..	1,011
1963-64	..	1,071
1964-65	..	1,374
1965-66	..	1,553

Under the Punjab Fruit Nurseries Act, 1961, four nurseries have been established in the private sector in the district to supply the pedigree fruit plants of the recommended varieties, free from any kind of insect pest or disease.

(iv) Improved Agricultural Practices.—The spectacular rise in the agricultural production in the district has been due to the introduction of high-yielding varieties of crops and the adoption of improved agricultural practices such as greater and better use of fertilizers and green-manuring, sowing of crops according to *pora* method, line-sowing of cotton, the Japanese method of paddy cultivation, trench sowing of sugarcane, use of improved furnaces for gur-making, and installation of tubewells and pumping-sets. The high-yielding varieties of different crops are as under:

Name of crop	Variety
Paddy	.. Jhona-349 and Basmati 370
Wheat	.. C-273, C-286, C-306 and PV -18 Mexican
Gram	.. Pb. 7 and S-26
Groundnut	.. P.G. -1 and C-501
Sugarcane	.. Co. 312 and COJ. 246
Cotton	.. American 320 F and *desi* 231 R

(v) Crop Competition Scheme.—The scheme was introduced in the district in 1951-52 to promote a spirit of healthy rivalry among the cultivators for maximising per acre yield of important crops through use of improved agricultural practices. Crop competitions are organised every year at village, block, district, State and all-India levels. The district enjoys the distinction of producing two Krishi Pandits, viz., Sarvshri Gurdev Singh and Walyati Ram for wheat and gram in the all-India level crop competition held in 1963-64. Shri Chanan Singh of Jagraon stood second in the all-India competition for potato held in 1965-66.

(vi) Agricultural Co-o.—peratives In India the idea of co-operation took a concrete shape for the first time by the passing of the Co-operative Credit Societies Act, 1904, which provided for the formation of credit societies only. Since then, during its over sixty years growth, the co-operative movement in the country has passed through phases of rectification and cautious expan-

sion, thereby expanding its scope to marketing , processing and many other aspects of economic and social life in India.

Agricultural technology is undergoing a change through the introduction of new machines, work methods, and input materials with a view to increasing productivity. This involves additional capital investment, such as improved seeds, and pedigree livestock, more and better fertilizers, insecticides, weedicides and increased use of propulsion fuels and electricity. The farmer's requirements for capital to make permanent farm investments and to meet operational costs are thus increasing fast. Often the private resources of the farmer are insufficient and these have to be supplemented through credit. Credit in the modern age has actually become the sine-qua-non of agricultural progress, where the availability of credit facilities of the requisite type seems to have a close correspondence with the adoption of modern technology in farming. Such a built-in system of farm credit has, therefore, to be evolved as would meet the varied credit needs of the small, medium and large scale farmers for their short, medium and long term requirements.

To stimulate agricultural development and step up farm production, it is, therefore, imperative that a package of facilities should be given to cultivators in the form of production credit, supply of agricultural inputs, marketing processing and a host of other allied services. Unless these facilities for progressive agriculture are forthcoming in a steady and sustained manner, thousands of farmers scattered all over the State cannot avail themselves of them.

While each of these facilities can, perhaps, be individually made available through State or private agencies, it has been recognised that for providing these facilities in a package form to large groups of farmers, there is no better substitute than co-operatives, which are farmers' own institutions and are fully responsive to their production requirements. As late as in 1927, the Royal Commission on Agriculture also emphasised this important aspect by observing that "there was no future for agriculture in India except through co-operation".

Ever since the advent of the co-operative movement in India, conscious efforts have been directed towards "co-operatising" of important facts of agricultural economy and in this respect Punjab continues to enjoy a rare distinction of being one of the few co-operatively progressive States, particularly in the sphere of agricultural production.

Co-operative societies in India can be broadly classified under heads: primary and secondary. While the primary societies deal directly with the members, the secondary societies, including Co-operative Unions, Central Co-operative Banks and State Co-operative Banks, extend help to the primaries.

Of the agricultural co-operatives, the primary agricultural co-operative societies are further classified into primary agricultural credit service societies and agricultural non-credit societies as under:

(1) Primary Agricultural Credit/Service Societies.—The co-operative movement in India started with these societies and today they constitute the base of the co-operative credit structure in the country. Ludhiana has been one of the advanced districts in the country in the development of co-operative movement since its inception in 1904. With the registration of the Central Co-operative Bank, Ludhiana, in 1916, the agricultural credit societies expanded their activities. Until the Punjab partition of 1947, these societies confined their activities to the tapping of local deposits and advance of loans. By and large, the co-operatives were functioning merely as thrift and credit societies.

At the time of the partition of the Punjab in 1947, the district was left with 300 societies, most of which were in a crippled condition due to the exodus of Muslim members and the blockade of funds in West Pakistan. In spite of all these handicaps, the movement got rehabilitated and made steady progress. During the First Five-Year Plan (1951-56), the credit output and membership increased substantially. During the Second Five-Year Plan (1956-61), the credit societies enlarged their functions so as to include supply and marketing of produce. About 20 rural godowns were set up and all regulated markets were covered with marketing co-operatives. During the Third Five-Year Plan (1961-66), the co-operatives made good progress both in terms of expansion programme and enlargement of activities. The number of primary co-operative agricultural credit/service societies increased from 933 in 1961-62 to 973 in 1965-66. The total amount of loans advanced increased from Rs. 174.38 lakhs in 1961-62 to Rs 369.24 lakhs in 1965-66.

The National Development Council defined the role of the co-operative movement in intensifying agricultural production and in mobilising local manpower and other resources. The Council placed the responsibility for increasing agricultural production on the co-operatives through the active participation of the village community. It recommended the representation of every rural family in village co-operatives and underlined the need for crop loans linked with comprehensive farming programme for increasing agricultural production.

The role of co-operatives was clearly defined in the Intensive Agricultural District Programme launched in the district in 1961-62. The farmers production plan, based on improved practices, is effectively executed through service co-operatives. On the input side, they provide credit and supplies while on the output side, they cater for marketing services. The co-operatives

put the I.A.D. programme on a permanent footing and continually motivate the cultivators to adopt new methods.

The number of service co-operative societies in the district was 899 in the co-operative year 1965-66 as compared to 932 in 1964-65.

All the service co-operatives are affiliated with the Ludhiana Central Co-operative Bank Ltd., Ludhiana, which in its turn is affiliated with the apex credit institution known as the Punjab State co-operative Bank Ltd., with head-quarters at Chandigarh. The Ludhiana Central Cooperative Bank has its branches at Jagraon, Samrala, Raikot, Khanna, Malaudh Gujarwal, and Doraha.

The number of co-operative agricultural credit societies, including multi-purpose societies, was 973 at the end of 1965-66 as compared to 1,016 at the end of 1964-65.

(1) **Agricultural Non-Credit Societies.**—Though the co-operative movement in India has been essentially a credit movement from its very inception, the non-credit aspect of the movement has received some impetus since World War II. The number of agricultural non-credit societies in the district was 134 in 1965-66 as compared to 138 in 1964-65. Their principal forms are as under:

(a) **Co-operative Marketing Societies.**—These grant loans only when the cultivators store their produce with them. The area of operation is wider and the members' liability is limited. The cultivators deal directly with the consumers through the societies and the middlemen are altogether eliminated from the transaction. In 1965-66 there were 8 co-operative marketing societies in the district.

(b) **Co-operative Farming Societies.**—Co-operative farming refers to a system of agricultural organisation, wherein cultivators of an area voluntarily associate together pool their individual holdings for purposes of cultivation and manage the whole farm as one unit under an elected management. Its main object is to combine incentive of ownership with the 'size economies' possible in agriculture. The system is suitable for the small land holdings which are not economic units and the scarcity of labour and its high charges require that the cultivation of land be carried out on a co-operative basis. Either co-operative farming societies should be re-organised on some regular scale or some system of joint farming be evolved, so that modern improved agricultural implements might be used and the problem of scarcity of agricultural labour be solved. The Government, therefore, encourages farmers to group themselves voluntarily into co-operative farming societies.

There were 74 co-operative farming societies in the district towards the end of 1965-66. Of these, 70 were co-operative joint farming societies and

co-operative collective farming societies, and 4 co-operative better-farming societies.

(c) Other Societies.—The number of other societies in the agricultural and allied fields in the district, during the year 1964-65 and 1965-66, was as under:

Type of society		Number	
		1964-65	1965-66
Co-operative Garden Colonies Societies	..	4	4
Co-operative Poultry Societies	..	14	14
Co-operative Dairying and Milk Supply Societies	..	31	31

With the adoption of modern techniques of agriculture, the farmer today needs financial assistance in the form of short-term loans to meet expenses on chemical fertilizers, improved seeds and implements, minor irrigation facilities, insecticides, etc. In view of the limited resources of the State, it becomes imperative to mobilise all the resources of the farming community, which is possible only by active participation of the persons concerned.

Co-operative societies, both service and stores, are thus playing an increasingly important role in helping the farmer augment the yield from his fields in many ways. The credit facilities cover all important inputs, minor irrigation works, such as tubewells, pumping-sets, percolation wells, agricultural implements, pesticides, etc.

All the villages in the district are covered by primary agricultural credit/service societies with a total membership of 1,42,698 (as on 30th June, 1966), covering 92 per cent of the rural population. The primary societies disbursed short and medium term advances to their members to the tune of Rs. 369.24 lakhs during 1965-66.

Primary Agricultural Credit/Service Societies provide fertilizers, insecticides and pesticides, and improved implements under one roof to all the members on cash or credit.

A network of 973 agricultural societies is spread all over the district and societies exist within two miles of the home of the farmer.

Besides primary agricultural credit/service societies advancing short and medium-term loans, the Land Mortgage Banks advance long-term loans for various major purposes like debt redemption, purchase of land, purchase of tractors, tubewells, etc.

The land mortgage banking structure in the Punjab consists of one apex institution, known as the Punjab State Co-operative Land Mortgage Bank Ltd., Chandigarh, (established in 1958) and 25 Primary Co-operative Land Mortgage Banks at various places in the State including 3 in Ludhiana District at Ludhiana, Samrala and Jagraon established in 1962. Since the Land Mortgage Bank in the Punjab was established very late, it could not divert the major flow of loans towards productive purposes till 1965-66. However, from July 1, 1967, it switched over to productive finance, and these institutions have established a name in the entire country for best recovery performances, maintaining a pool of trained staff and keeping lowest lending rates.

(vii) Progress of Scientific Agriculture

Agricultural Implements.

Improved agricultural implements and machines play a vital role in increasing the agricultural production. The farmers are gradually mechanising agriculture and adopting improved implements in accordance with their utility and scope for use. With the operation of the Intensive Agricultural District Programme in the Pilot Project scheme in the district, the farmers are showing increasing interest in the matter. The wooden plough has been completely replaced by the iron plough. The Persian wheels are being replaced by pumping-sets and tubewells. The wooden wheel cart has been completely replaced by the pneumatic tyre cart. The traditional system of threshing of wheat under the feet of bullocks has been almost discarded in favour of the mechanical method through power threshers operated by the tractors or small motors. The tractor owning farmers are also adopting precision machines like seed drills, seed-cum-fertilizers drills and corn planters. The tractors are steadily replacing the bullocks. Almost all types of tractors manufactured in the country are operating in the district. The total strength of tractors in Ludhiana district touched the level of 1,000 at the end of 1966.

The farmers have widely adopted the improved implements, such as the soil inverting ploughs, disc harrows, single row cotton drills, seed-cum-fertilizers drills, corn planters, shellers, etc. The district produces agricultural equipment sufficient not only to meet its own requirements but also that of the other districts in the State besides export to other States.

The old type of implements still in use in the district are *desi* plough, *sohaga* and *karaha*. The wooden part of the *desi* plough (soil stirring portion)

has been replaced by iron one and this type of bullock-drawn plough is considered to be the best as it can stir soil up to 5-6 inches deep.

The table below gives the production of agricultural implements in the district during 1965-66:

Name of implement		Numbers	Cost
			Rs
1. Ploughs	..	3,749	82,728
2. *Tirphali*	..	708	8,572
3. Disc harrow	..	200	35,500
4. Fertilizer seed drill or seed drill	..	1	150
5. Bar harrow	..	20	1,218
6. Single row cotton drill	..	317	6,340
7. Wheel hoe	..	50	1,750
8. Power wheat thrasher	..	144	1,44,605
9. Tractor disc harrow	..	186	4,75,491
10. Persian wheel	..	60	1,433
11. Persian wheel buckets	..	44,745	1,37,905
12. Juice boiling pan	..	285	33,49,233
13. Poultry equipment	..	50	2,960

(*Source* : Agricultural Engineer (Impl.), Punjab, Ludhiana)

Seeds

Improved seeds constitutes a basic requirement of crop production. High-yielding varieties of seeds increase agricultural production considerably. The Department of Agriculture is carrying on a regular campaign for popularising the use of improved seeds. The multiplication and supply of improved varieties of seeds is, thus, an important function of the Department. In order to have regular supply of improved seeds several seed farms were opened during the First Five-Year Plan.

In 1965-66, there were seven seed farms functioning in the district where improved varieties of seeds were grown for distribution among the farmers. Besides, there were a number of model farms in the different blocks in the district. The function of the seed farms and model farms is to show to the general peasantry the superiority of various recommendations of the Agriculture Department, and to demonstrate the scientific methods of cultivation. The particulars regarding the different seed farms in the district are given below:

Seed Farms in Ludhiana District, 1965-66

Name of Seed Farm/Tahsil	Date of establishment/Location	Area of Seed Farm (acres)	Kind of soil	Name of seed	Variety of seed	Quantity produced in 1965-66 (quintals	Yield per acre in *rabi* 1965-66 (quintals)
1	2	3	4	5	6	7	8
		A.K.M.					
1. Mutton I Tahsil Samrala	26-12-1958 Samrala Block	26-5-3	Clay loam	Wheat ,,	C-306 Mexican	139·50 4·00	5.31 ..
2. Mutton II Tahsil Samrala	11-3-1960 Samrala Block	27-5-8	,, ,,	,,	C-306	170·49	7·4
3. Paproudi Tahsil Samrala	22-3-1959 Samrala Block	20-2-0	Medium loam	,,	C-306	149·32	8·50
4. Bhattian Tahsil Samrala	27-3-1961 Machhiwara Block	56-7-1	Clay loam	,,	C-273	626·00	9·5
5. Hedon Tahsil Samrala	8-3-1960 Machhiwara Block	20-1-4	..	,,	C-273 Mexican	191·00	9·0
6. Bhamipura Tahsil Jagraon	30-3-1959 Jagraon Block	19-0-0	Sandy	,, Groundnut P.B.G. No. 1	C-273 Mexican	108·00 10·19 3·33	6·75 11·40 ..
7. Gopalpur Tahsil Ludhiana	9-12-1959 Dehlon Block	19-6-3	Loamy	Wheat Sugarcane	C-273 ..	104·93 428·75	7·34 ..

(*Source*: District Agricultural Officer, Ludhiana)

The requirements of improved seeds are met with by raising foundation seeds at the Government seed farms and block model farms, and by their systematic multiplication through seed registered growers. In 1965-66 there were 310 registered growers in the district. The distribution of seeds is made through the District Wholesale Co-operative Marketing ad Supply Society which has its sub-depots at all important places in the district.

The distribution of the different varieties of improved seeds has gradually increased. Their year-wise distribution in the district by the Agriculture Department, during 1960-61 to 1965-66, is given below :

(Maunds)

Crops	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
Bajra	5	50	35	—	—	—
Maize (hybrid)	301	32	179	179	503	—
Wheat	4,585	10,710	5,368	6,400	17,450	25,000
Gram	130	612	250	248	1,940	—
Groundnut	—	198	800	560	600	1,250
Cotton	5,595	4,976	5,000	5,474	4,270	5,000
Dhaincha	30	218	638	352	240	—
Total	10,646	16,796	12,270	13,213	25,003	31,250

(*Source* : District Agricultural Officer, Ludhiana)

Before multiplication it is essential to ensure the grades of improved varieties of vegetable and other important crop seeds. Under the Seed Certification Scheme, launched in the country on January 15, 1958, a Seed Testing Laboratory was opened at Ludhiana. Situated in the campus of the Punjab Agricultural University, Ludhiana, it is fully equipped with the latest equipment and apparatus for testing the seeds in regard to purity, moisture and germination tests, etc. During the first three years of the certification scheme, the work of testing and certification was confined only to vegetable seeds. The laboratory started functioning on scientific and regular basis from the year 1962.

Crop Rotation

Each crop extracts from the soil some particular nutrient suited to it. If the same crop is repeated, the soil becomes deficient in that particular nutrient and gradually becomes unfit for growing the same crop until that deficiency is made good. The soil recuperates its fertility if another crop,

which uses a different nutrient is grown. A careful scheme of crop rotation, which includes restorative legumins is, therefore, necessary for the maintenance of soil fertility. It is also important for liberating plant nutrients useful for other crops.

The farmers are aware of the utility of proper crop rotation and try to follow it as best as possible. The rotation varies from soil to soil and it differs under irrigated and unirrigated (*barani*) conditions. The rotations generally followed by the farmers in the district are given below:

Irrigated Areas

1. Wheat-cotton-*senji*-sugarcane
2. Wheat-cotton-*moth*-maize
3. Wheat-maize
4. *Berseem*-maize
5. *Chari-berseem*
6. *Groundnut-wheat*
7. *Chari*-gram
8. Gram-rice-*berseem*
9. Wheat-cotton

सत्यमेव जयते

Unirrigated Areas

1. Rice-fallow-rice
2. Wheat-fallow-wheat
3. *Kharif* fodder-fallow-American cotton
4. Wheat+gram-fallow-wheat+gram
5. Groundnut-fallow-groundnut
6. Groundnut-Wheat+gram-groundnut

Fallow Cultivation:

The land, from which one crop has been harvested and is left to rest until the next sowing, is called fallow land. Fallow cultivation, therefore, means the cultivation of land which has thus rested. In the absence of organic manures and fertilizers fallow cultivation is very important for replenishing soil fertility reduced by the previous crop.

With the extension of irrigation facilities and owing to pressure on land, not much area is left fallow. The extent of current fallows, however, depends on rains. If rains are timely, maximum area is sown and little is left fallow. The area under current fallows[8] in the district during different years is shown in the table entitled 'Classification of Area by Land Use' given at pages 183-84.

Fertilizers and Manures

Fertility of soil is the basic pre-requisite for good out-turn of crops. The fertility can be maintained and improved through the adoption of such agricultural practices as not only tend to minimise the loss of nutrients but also add them to the soil. Fertilizers and manures improve the texture and fertility of the soil and thereby increase crop yield.

Chemical Fertilizers.—The adequate and timely use of fertilizers is by far the most important factor for bringing about a quick increase in agricultural production, especially under irrigated conditions. The progress of fertilizers consumption during the First and Second Five-Year Plans was rather low. As a result of various educational, promotional and organisational measures, such as starting of the Intensive Agricultural District Programme, publicity, large-scale demonstrations,[9] training camps, phased indenting, increase in distribution centres, adequate credit and effective co-ordination between various departments, viz., Agriculture, Co-operative and Development, and above all individual personal contacts through various types of crop/farm plans, the consumption of fertilizers, both nitrogenous and phosphatic has steadily increased during the Third Five-Year Plan. This is borne out by the following data regarding the distribution of fertilizers during the period from 1960-61 to 1965-66 :—

Year	Chemical fertilizers distributed (Tons)
1960-61	5,629
1961-62	13,418
1962-63	17,248
1963-64	25,506

8. Fallow lands are of two kinds. Lands which, after abandonment remain uncultivated over a long period are called 'old fallows', while those kept uncultivated during the current year are called 'current fallows'.

9. The Fertilizer Demonstration Scheme was started in 1954 on an all-India basis to encourage the extensive use of chemical fertilizers as the quickest means of increasing the agricultural production. Since the fertilizer demonstrations are arranged regularly every year on the cultivators fields, the programme of demonstrations was further strengthened from the year 1963, with the imparting of training to the farmers in the judicious use of fertilizers. The fertilizers demonstrations have proved very helpful in creating the fertilizers consciousness among the farmers.

Year	Chemical fertilizers distributed (Tons)
1964-65	40,359
1965-66	53,916

(*Source* : District Agricultural Officer, Ludhiana)

As fertilizers are getting popular among the cultivators, the demand for the same is increasing rapidly. It has, however, not been possible to meet the demand in full due to limited production in the country and low imports, on account of foreign exchange difficulties. Availability of credit is a vital factor in pushing up the consumption of fertilizers as the farmers have generally meagre resources at the sowing time and are unable to purchase fertilizers on cash payments. Fertilizers are, therefore, issued as *taccavi* through authorised officials. Being a controlled commodity, the supplies of fertilizers are arranged through the Government. The District Wholesale Co-operative Marketing and Supply Society distributes them to depot holders on cash as well as on credit.

Local Manurial Resources.—The importance of manure in increasing the crop yield cannnot be over emphasised. Manure is the vital factor for recuperation of fertility of the soil which is lost through continuous cropping. The production of chemical fertilizers in the country is still adequate. In view of the shortage of fertilizers, the only other alternative left with us for increasing the soil fertility and production is through the development of local manurial resources to the fullest extent as is being done in some other countries. These include rural compost and cattle dung manure, green manuring, town compost and sewage/sullage utilisation.

Rural Compost and Cattle Dung Manure.—The Rural Compost and Cattle Dung Manure Scheme came into operation in January 1958 on an all-India basis to develop the local manurial resources. The main object of the scheme is to increase the quantity of cattle dung manure and to improve its quality. This is being achieved through larger and better utilization of all the manurial resources in the villages.

The scheme has vital role to play in increasing agricultural production in view of the shortage of chemical fertilizer, their high cost and foreign exchange difficulties in importing them in large quantity to meet local requirements. The scheme will indirectly result in increasing the production and improvement of economic condition of the farmers. New compost pits are dug and old ones are repaired for proper conservation of farm and household wastes. Cattle dung is, however, still being used as fuel by cultivators in the

villages, though during rains most of it goes to manure pits and is converted into compost.

Previously, the work of compost making was carried out only by persuasion and propaganda which proved to be quite an uphill task because the farmers in the villages were often found reluctant to adopt the improved methods. It was felt that some legislation was necessary to make it obligatory on the farmers to conserve their cattle dung and other organic wastes properly in the pits. Thus, the East Punjab Conservation of Manures Act, 1949 (East Punjab Act No. 15 of 1949) was passed in October, 1949. Under this Act, action can be taken against the defaulter.

The quantity of rural compost prepared during the past few years is as under :

Year	Compost prepared (tonnes)
1962-63	3,46,960
1963-64	5,63,365
1964-65	5,56,513
1965-66	5,40,325

(*Source* : Field Manure Officer-*cum*-Town Compost Officer, Punjab, Chandigarh)

Green Manuring :—The beneficial effects of green manuring are well recognised. Farm yard manures and compost are not available in sufficient quantities to the farmers to meet their full requirements. The artificial fertilizers are also in short supply. As a result of the hot climate the available humus in the soil is burnt away quickly. Periodical application of organic matter is, therefore, essential to replenish the loss of humus, which is necessary for keeping the soil in good condition by enhancing the supply of nitrogen and increasing the growth of micro-organisms. Green manuring is the best source of building up soil fertility.

The Extension of Green Manuring Scheme came into operation in the Punjab with effect from April 1, 1961. It aims at popularising the use of green manuring in the State. The Government encourages the adoption of this practice by the farmers by granting subsidies on seeds of green manuring

crops. The Irrigation Department also grants remission of water rate, if crops are buried for green manuring purposes before the 15th of September.

The total area under green manuring crops in the district during 1963-64 to 1965-66 was as under:

Year	Area under green manuring crops (acres)
1963-64	61,810
1964-65	65,528
1965-66	56,053

(*Source* : Field Manure Officer-*cum*-Town Compost Officer, Punjab, Chandigarh).

Town Compost and Sewage Utilisation:

Urban Compost.—The bulky organic manures are quite important for maintenance of soil fertility and increased crop production. The refuse wastes available in the towns, i.e., all sort of waste organic matter such as cattle dung, house refuse, leaves of trees, night soil, etc., are a potential source of supply of good quality compost, which could be used for crop production. To harness this source for increasing agricultural production, all out efforts are being made in the State to have these wastes properly conserved for manurial purposes. The places where urban compost is prepared in the district are Jagraon, Khanna, Ludhiana, Raikot, Samrala and Doraha. The production of urban compost, during 1961-62 to 1965-66, is given below :

Year	Production of urban compost (tonnes)
1961-62	33,495
1962-63	33,079
1963-64	34,315
1964-65	35,974
1965-66	32,691

(*Source* : Field Manure Officer-*cum*-Town Compost Officer, Punjab, Chandigarh).

Sewage/Sullage Utilization.—Sewage or sullage is a mixture of numerous kinds of wastes from household and industry which are conveniently carried away by water. A large proportion of the waste matter is organic in nature and contains plant food nutrients in varying quantities and can be used with advantage for fertilizing the land. Crops grown on sewage/sullage effluents give considerably higher yield than those with ordinary irrigation water.

Sewage/sullage is being used wholly or partially at Khanna, Ludhiana, Jagraon and Samrala while this useful source for increasing agricultural production is not being harnessed properly at Raikot. To make use of this source fully, a Crash Programme Scheme has been approved by the Government of India for the Utilization of Sewage /Sullage for Khanna, Ludhiana (Civil Lines) and Ludhiana (Gaushala).

(viii) **Agricultural Diseases and Pests.**—Crops are occasionally exposed to damages from an immense variety of diseases and pests. Plant protection measures against pests and diseases are necessary for the successful raising of farm crops. Suitable control operations against the attack of insect pests or diseases of cereals, fruits, vegetables and stored grains are, therefore, carried out as regular practice by the Agricultural Department.[10]

The common insect pests diseases and noxious weeds in the district are as under :

(1) Crop pests and diseases

American cotton :	(i)	Cotton-jassid
	(ii)	White-fly
	(iii)	Leaf roller
	(iv)	Pink bollworm
	(v)	Spotted bollworm
	(vi)	Anthraonose
Maize :	(vii)	Maize borer
Sugarcane :	(viii)	Termites
	(ix)	Sugarcane stem-borer
	(x)	Sugarcane top-borer

10. The strength of the plant protection staff in the district, during 1965-66, consisted of 1 Plant Protection Inspector, 2 Agricultural Sub-Inspectors (one for the Plant Protection Scheme and the other for Locust Control Scheme/other schemes), 2 Beldars and 1 Mechanic,

(xi) Sugarcane pyrilla

(xii) Gurdaspur borer

Rice : (xiii) Surface grasshopper

(xiv) Rice bug

(xv) Rice hispa

Groundnut : (xvi) Hairy caterpillars

(xvii) Aphis

(xviii) *Tika* disease

Sarson toria and raya: (xix) Plant lices (aphis)

Radish : (xx) Painted bug

(xxi) Thrips

General crops: (xxii) Grasshoppers

(xxiii) Hairy caterpillars

2. Vegetable pests

Brinjal : (i) Brinjal jassid

(ii) Brinjal fruit-borer

(iii) Shoot borer

(iv) Brinjal mite

Bhindi: (v) *Bhindi* jassid

(vi) *Bhindi* mite

(vii) Spotted bollworm

Cabbage and cauliflower : (viii) Mustard aphis

(ix) Cabbage semi looper

(x) Cabbage caterpillar

(xi) Tobacco caterpillar

(xii) Diamond moth

Potato : (xiii) Potato jassid

(xiv) Potato blight

(xv) Cutworm

Onion, garlic, etc.: (xvi) Onion thrip

3. Fruit pests and diseases

Citrus: (i) White-fly

(ii) Citrus psylla

(iii) Citrus canker

Mango: (iv) Mango mealy bug

(v) Mango hopper

(vi) Mango Anthraonose

Grapes: (vii) Grap vine thrip

(viii) Grape Anthraonose

(ix) Grape powdery mildew

Guava: (x) Fruit-fly

4. Stored grains pests

(i) *Khapra*

(ii) *Susri*

(iii) *Dhora*

5. Pests other than insects

(i) Field rats

(ii) Squirrels

6. Obnoxious weeds

(i) Pohli

(ii) *Piazi* and other weeds

The above-mentioned pests and diseases attack the standing crops and stored grains with varying intensity. The Agriculture Department is propagating different control measures to reduce the damage caused by these agencies. The State Government has also enacted the East Punjab Agricultural Pests, Diseases and Noxious Weeds Act, 1949, under which the cultivators who do not eradicate different weeds, pests and diseases before the maturing of seeds, are reported against for legal action, wherever necessary.

(d) Animal Husbandry and Fisheries

Livestock are the backbone of the peasantry. They not only supply the motive power for the agricultural operations but also provide milk and other by-products and thereby help in augmenting the income of the farmer. Moreover, they help in securing a balanced diet for the urban people and reduce dependence on foodgrains alone.

Animals, especially cattle, play an important role in the economy of the district. Animal Husbandry, thus, farms an integral part of agriculture. The essential equipment of the peasant-former includes a pair of bullocks to do the ploughing, operate the Persian wheel and draw the cart. Even though motor power and electricity are by and by replacing the bullocks, yet for a long time to come, the importance of the latter will remain pre-eminent. Further, milk which the cattle yield, is of great importance as a nutritive and protective food. Manure obtained from livestock is also of vital importance for agricultural production. Skins and hides, meat and wool, which the animals provide, also form an important source of national income.

For the development of animal husbandry, including veterinary aid, Ludhiana District falls under the Jullundur Division, which is under the charge of a Deputy Director, Animal Husbandry, with headquarters at Jullundur. He is under the control of the Director, Animal Husbandry, Punjab, Chandigarh. At the district level, there is a District Animal Husbandry Officer at Ludhiana, holding semi-independent charge of the district. The details of the staff under him are given in the Chapter XIII 'Other Departments'.

The district possesses a good number of livestock including cattle, buffaloes, horses and ponies, donkeys, mules, sheep, goats, camels and pigs. Their number, according to 1961 census, is as follows :—

Number of Livestock in Ludhiana District (1961)

Particulars	Tahsil Ludhiana	Tahsil Jagraon	Tahsil Samrala	District Ludhiana
Cattle	99,980	77,830	68,028	2,45,838
Buffaloes	84,921	59,568	51,821	1,96,310
Horses and Ponies	544	510	263	1,317
Donkeys	2,529	1,752	1,616	5,897
Mules	321	62	124	507
Sheep	4,429	8,450	915	13,894

Particulars	Tahsil Ludhiana	Tahsil Jagraon	Tahsil Samrala	District Ludhiana
Goats	52,101	11,223	10,607	73,931
Camels	4,497	3,603	3,502	11,602
Pigs	1,518	137	4,148	5,803
Total	2,50,840	1,63,135	1,41,024	5,54,999

(*Statistical Abstract of District Ludhiana*, 1963, pp. 74-75)

(i) **Cattle Breeding.**—The Department of Animal Husbandry has taken up the development of cattle-breeding and improvement of their qualities. The bulls of different breeds are provided to the villagers for better breeds of cattle. There is a buffalo-bull rearing farm at Bahadurpur in Ludhiana tahsil where young bulls are reared and supplied free of cost to village panchayats for improving the buffalo breed. In 1965-66, there were 747 approved cow-bulls and 411 buffalo-bulls in the different villages in the district.

(ii) **Key Village Scheme.**—An organised large scale cattle development programme, known as Key Village Scheme, was initially sponsored by the Government of India during the First Five-Year Plan. The main object is to improve the milk strain and draught capacity of cattle by upgrading of their breeds through adoption of scientific methods of breeding, feeding, disease control, marketing, etc., in selected compact areas with the ultimate object of developing the cattle wealth. The scheme was further intensified during the Second and Third Five-Year Plans.

The scheme, jointly sponsored by the Government of India and the State Government, was introduced in Ludhiana district in 1954 under the First Five-Year Plan when Key Village Block was started at Ludhiana with 6 Key Village Units attached to it. In 1964, the Ludhiana Block was expanded so as to have 10 Key Village Units. The Artificial Insemination Centre at Ludhiana has 6 bulls (3 Nili buffalo bulls, 2 Haryana cow bulls and 1 Sahiwal cow bull) meant for artificial insemination only, and each Key Villages Unit has 2 bulls (1 Nili buffalo bull and 1 Haryana cow bull) meant for natural service.

Another Artificial Insemination Centre, with one Key Village Unit attached to it, was started by the Market Committee, Ludhiana, at Sahnewal in 1955.

The scheme was well received by the cattle owners and, during the Third Five-Year Plan, one more Key Village Block was started in 1964 at Samrala, with 6 Key Village Units.

On the transfer of Payal Sub-Tehsil to Ludhiana district (from Patiala district) in 1963, the Key Village Block Doraha, with 6 Key Village Units, was also included in Ludhiana.

Thus, by the end of the Third Five-Year Plan, i. e., during 1965-66, there existed in the district the following four Key Village Blocks, each under the charge of a Veterinary Assistant Surgeon :—

Key Village Block	Date of opening	Names of Key Village Units attached	No. of villages covered
1. Ludhiana	15-2-1954	1. Dhandari Kalan	24
		2. Barewal Awanan	
		3. Lalton Kalan	
		4. Kheri	
		5. Jassowal	
		6. Bagga Khurd	
		7. Jamalpur Awanan	
		8. Qila Raipur	
		9. Gil	
		10. Dhandara	
2. Sahnewal	3-6-1955	1. Kanech	2
3. Samrala	6-5-1964	1. Madpur	19
		2. Jaspalon	
		3. Gharkan	
		4. Seh	
		5. Lalouri	
		6. Rohila	
4. Doraha	16-1-1955	1. Rampur	14
		2. Kubba	
		3. Payal	
		4. Dhamot	
		5. Bilaspur	
		6. Ghaloti	
		7. Buwani	

Out of the above mentioned 4 Key Village Blocks, 3 Key Village Blocks with 23 Units are being run under the Key Village Scheme, while the 4th at Sahnewal is financed by the Market Committee, Ludhiana.

Another Key Village Block was started on July 16, 1966, at Jagraon, with 10 Key Village Units, viz., Dakha, Man, Sawaddi, Ghalib Kalan, Lilan, Kaonke, Dalla, Lamma, Rumi and Hans.

The Assistant Director, Key Village Scheme, with headquarters at Ludhiana, supervises the working of the Key Village Blocks in the three districts of Ludhiana, Jullundur, and Hoshiarpur, and provides technical guidance whereever necessary. This office was established in May, 1962, in pursuance of the recommendations contained in the report of the Key Village Expert Committee appointed by the Government of India 1961.

(iii) **Preservation of High Milk Yielding Buffaloes and Cows.**—The future scope for improvement in the livestock wealth rests on the nucleus stock which needs be well preserved and developed through planned and improved breeding practices. To create an incentive among the public not to part with good quality animals[11], a scheme for the preservation of high milk yielding buffaloes and cows by grant of subsidy was launched in 1962 during the Third Plan period. Thus 22 buffaloes, 11 cows and 7 calves were given subsidy during this period.

(iv) **Development of Gaushalas.**—Taking into consideration the huge potentialities of the *gaushalas* and *pinjrapols* all over the country, a Gaushala Development Scheme was launched on an all-India basis to develop selected *gaushalas* to serve as cattle breeding-cum-milk producing centres. Such a scheme was introduced in the Punjab during 1956-57 under the Second Five-Year Plan and was further continued during the Third Five-Year Plan. The three *gaushalas*, existing in the district at Ludhiana, Jagraon and Raikot are thus proposed to be taken up for development, one by one, for conversion into cattle breeding-cum-milk producing centres. Accordingly, the *gaushala* at Ludhiana was taken up for development in 1965-66.

(v) **Cattle Fairs and Shows.**—To stimulate the interest of the breeders in cattle development work and to get them good returns on their money invested in this industry, a number of cattle fairs and shows are held in the district.

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11. A large number of superior breed buffaloes and cows are exported to other States. These are sent to the slaughter-houses soon after the end of lactation period and their progeny are also neglected. This large scale depletion of superior milch stock has been going on for years and it was felt that steps must be taken to preserve the good quality animals. To create an incentive among the public not to part with good quality animals, the Scheme for the Preservation of High Milk Yielding Buffaloes and Cows by grant of subsidy was launched during the Third Five-Year Plan.

At the cattle fairs, besides providing marketing facilities, handsome prizes are awarded to the breeders for the excellent stock bred by them. The cattle fairs also provide an opportunity to the breeders to select suitable types of animals, and an occasion for the exchange of ideas and experience in the field of livestock breeding operations.

With the same end in view, celebration of the Gosamvardhana Week was started in 1955 on the Gopal Ashtami day every year. The funds for the purpose are allotted by the State Animal Husbandry Department out of which 50 per cent of the expenditure is met by the Central Council of Gosamvardhana, New Delhi[12].

(vi) **Control of Menace of Wild and Stray Cattle.**—Great damage is done to the crops by wild and stray cattle in rural areas. Their number is on the increase due to the progressive imposition of complete ban on the slaughter of cattle in the State. In order to control this menace, a scheme for the rounding up of wild and stray cattle as well as their disposal, known as the Wild and Stray Cattle Catching Scheme, was launched in the State in 1962-63 during the Second Five-Year Plan. It was, however, felt that more extensive efforts were needed for tackling this problem. Accordingly, a fairly comprehensive programme was included in the Third Five-Year Plan. Under the scheme, cattle catching parties have been organised to round up wild and stray cattle. One party is working at Ludhiana. The cows thus rounded up, found fit for breeding, are handed over to the breeders of the southern States. Those which are unfit for breeding are sent to the *gosadan* at Mattewara. During 1965-66, 782 wild and stray cattle were rounded up in the district.

(vii) **Gosadans.**—The elimination of useless and unproductive cattle is an important supplementary factor for ensuring success in our cattle

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12. The programme for the celebration of the Gosamvardhana Week in the State is chalked out by the Director, Animal Husbandry, Punjab, in consultation with the Central Council of Gosamvardhana. During the year 1965, the following programme was chalked and is observed every year :—

(i) Exhibition of cattle feeds, dairy equipment, improved methods of management of cattle, feeding and prevention of diseases.

(ii) Propaganda by distribution of posters, magic-laterns and films regarding cattle (to be shown by the Public Relations office of each district).

(iii) Free distribution of milk to school children and taking out of processions of school boys and best animals of the cattle show through important bazars and streets to Gaushalas.

(iv) Holding of Cow Conference and Gosamvardhana Sammelans and delivering of speeches on cow breeding, etc.

(v) Distribution of prizes to the owners of the best animals selected in the cattle shows.

development programme. This problem has increased in importance due to the imposition of increasing ban on the slaughter of cattle in the State. In order to segregate useless and inferior cattle, *gosadans* have been established. One *gosadan* was established at Mattewara, tahsil Ludhiana, on April 1, 1954. It is maintained under a Veterinary Assistant Surgeon. Land measuring 3,383 acres has been allotted to it for grazing and cultivation of fodder. The number of animals kept there was 1,925 and 2,018 on 31st March, 1965 and 31st March, 1966, respectively.

(viii) Castration.—Effective improvement in livestock can only be achieved if efficient and strict culling of all sub-standard animals is carried out regularly. Any amount of breeding carried out to improve livestock and selection would be futile if not supported by vigorous culling. During 1965-66, 5,213 animals, including 4,624 bovines, 8 equines and 581 others, were castrated.

(ix) Area under Fodder Crops.—About 14 per cent of the total cropped area of the district is under fodder crops. Apart from these crops, the stalks of *bajra, jowar* and maize and the chaff of wheat, gram and minor cereals are used as animal feed. The important among the fodder crops are *chari*, green maize, *gwara*, *metha*, *javi*, *berseem* and lucerne. Of these, *chari* is the leading crop and covers about 28 per cent of the forage crop areas. The following table gives the area under different fodder crops in the district during the years 1961-62 to 1965-66:—

Area under Fodder Crops in Ludhiana District (1961-62 to 1965-66)

Fodder Crops	Year				
	1961-62	1962-63	1963-64	1964-65	1965-66
Kharif Crops	(acres)	(acres)	(acres)	(acres)	(acres)
Jowar (*Chari*)	38,359	36,466	32,129	28,394	43,244
Gwara	6,749	5,289	5,398	13,129	6,396
Other fodders	30,626	34,502	31,480	39,299	33,537
Total	75,734	76,257	69,007	80,822	83,177
Rabi Crops					
Berseem	17,113	23,234	21,408	33,570	34,454
Oats (*Javi*)	2,788	1,035	3,852	2,232	969
Lucerne	58	6	2,150	53	4
Other Fodders (Turnips)	47,116	40,491	52,532	44,967	33,908
Total	67,075	64,766	79,942	82,922	69,335
Grand Total	1,42,809	1,41,023	1,48,949	1,63,744	1,52,512

(*Source* : Deputy Commissioner, Ludhiana)

The feed and fodder development programme has also been undertaken under the Key Village Scheme. The farmers are persuaded to grow improved varieties of fodders and grasses by supplying the seed at subsidised rates. The utility of improved seed, cultural practices and inter-cropping is explained to them by laying out demonstration plots, each 1/4 of an acre, in cultivator's own field. Breeders are also asked to conserve the surplus green fodder during the flush season for utilising the same during the lean period. The paddy straw, utilised as cattle feed, is very deficient in food value.

Shamlat deh or the village common lands, which were being used as pasture lands before consolidation of holdings, have now been distributed among the villagers and brought under cultivation. There are no pastures or grazing lands as such in the district.

(x) **Dairy Farming.**—Buffaloes and cows constitute the main source for the supply of milk. According to 1961 Livestock Census, the number of cows (in milk) and buffaloes (in milk) in the district was 45,775 and 64,573, respectively. Sparsely distributed in certain areas of the district, there are some goats and sheep also, but their milk yield is small and hence of no commercial importance.

The existing condition of dairy industry in the district is far from satisfactory. There is neither any organised milk production nor its collection, processing and distribution on proper lines. There exists the agency of the middle man who continues to exploit both the farmer, producer in rural areas, and the consumer in urban areas. This has led to lack of interest among producers to maintain quality milch animals. There is an unhealthy competition in the dairy trade. The malpractice of adulteration of milk and milk preparations continues and the prices of milk remain quite high. In short, the dairy industry in the district needs all-round development in view of its immense potentialities. The production and the marketing of milk and milk preparations need to be organised so as to ensure a ready market and remunerative prices to the rural milk-producers and to safeguard the interests of the consumers.

There is no milk-supply scheme in the district. Nor is there any Government owned dairy farm run on commercial basis except the Students' Dairy Farm attached to the College of Agriculture, Ludhiana.

In the villages, most of the milk is used by the producers for domestic consumption and the surplus quantity is either converted into butter and ghee or is sold in the towns through the agency of milk-men. The milk produced in urban areas is generally sold as fluid milk.

(xi) Sheep Breeding.—Improved methods of rearing, breeding and management of sheep, including the shearing and grading of wool, besides providing veterinary aid to protect sheep from contagious and non-contagious diseases, which cause heavy losses to the breeders, are essential for improving the quality and quantity of wool yield. The scheme for development of sheep and wool in the State was introduced in 1957. It aims at developing the sheep and wool industry by improving the quality and quantity of wool yield through scientific knowledge in sheep husbandry and wool technology imparted to the sheep farmers and by registering the flock for the maintenance of breeding records, and by controlling the outbreak of diseases among sheep[13].

The total number of sheep and goats in the district, according to 1961 Livestock Census, is given below :

Particulars	Tahsil Ludhiana	Tahsil Jagraon	Tahsil Samrala	District Ludhiana
Sheep	4,429	8,450	915	13,794
Goats	52,101	11,223	10,607	73,931

(*Statistical Abstract of District Ludhiana*, 1963, pp. 84—91).

All the sheep in the district are of Bikaneri and local breed. Selective methods are employed for breeding. The best ram out of the lot available is selected and utilised to improve the breed.

(xii) Poultry Farming.—The change in food habits in general since the partition has given a stimulus to poultry farming. Religious prejudices against eating of poultry and eggs, prevalent among certain sections of the population, are being gradually shed.

Previously, people used to keep *desi* birds on free range system. With the establishment of two Poultry Service Centres at Ludhiana and Samrala, farmers have taken to poultry farming on scientific lines. The two poultry co-operative societies, viz., Poultry Co-operative Society, Nandpur, and Ludhiana Model Co-operative Society, Jodhwal, functioning in the district have 25 and 60 members, respectively. There is a Government Poultry Exten-

13. To meet the extra requirements of stud rams for Sheep and Wool Extension Centre, one sheep breeding farm is being proposed to be established at Mattewara, tahsil Ludhiana, during the Fourth Plan period.

There is no organised agency for sheep shearing and marketing of wool in the district. One large scale Wool Grading-cum-Marketing Centre, with eight Sheep Shearing Sheds around it, is being proposed to be established during the Fourth Plan period.

sion Centre at Ludhiana whose main function is to provide veterinary aid to the poultry farmers and remove their difficulties. There is also a Feed Centre of the Punjab Poultry Corporation at Ludhiana whose main function is procurement of feed and its sale to poultry farmers. There are about 50 poultry farms in the district. High egg laying strains of white leghorn and Rhode Island Red birds are being maintained in the district by poultry farmers.

According to Livestock Census, 1961, the total number of fowls, ducks, turkeys and others in the district was 92,708.

The Poultry Wing was re-transferred to the control of the Animal Husbandry Department from that of the Industries Department from April, 1966.

(xiii) Piggery.—Pig is a very prolific breeder. Its offsprings grow up quickly and mature comparatively at an early age as compared to other food animals. Pigs, therefore, have great potentialities for augmentation of food for they can be rapidly increased in number.

To accelerate production of protein rich food for human consumption, to give impetus to scientific pig breeding and development of pig industry on proper lines and to up-grade the local breed so as to produce more meat,a Pig Breeding Unit was established at Ludhiana on December 18, 1964, with a foundation stock consisting of 30 sows and 6 boars of Yorkshire breed. It is under the charge of a Veterinary Assistant Surgeon who is under the administrative control of the Piggery Development Officer, Punjab, Chandigarh. His duties comprise breeding, feeding, management of pigs at the farm and also to propagate the knowledge of pig husbandry to the farmers in the development blocks around the farm. The main object of the Pig Breeding Unit is to improve the indigenous stock by providing good quality pigs to interested breeders at Government approved rates. Till March, 1966, it had distributed about 300 boars to the breeders in the different sub-units in the district.

The indigenous pig is a poor performer and is not suitable for the production of ham and bacon. Therefore, to improve the quality of pork and to promote piggery development work in villages, six sub-units at Samrala, Machhiwara, Khamanon Kalan, Khera, Sahnewal and Dakha have been established in the district. Each of these is controlled by a Veterinary Assistant Surgeon incharge of the Veterinary Hospital of the area. In each sub-unit, 50 boars are issued, one boar to each breeder who posseses five indigenous sows. Besides each breeder is paid a subsidy of Rs.5 per month for the maintenance of the boar. As a result of this scheme, quite a large number of graded pigs are now available in the villages of the sub-units concerned for slaughter.

According to the Livestock Census, 1961, the total number of pigs in the district was 5,803.

(xiv) **Fisheries.**—The district was quite rich in fishery resources. The river Satluj, Budha Nala and canals formed the main natural fisheries. The construction of Bhakra Dam over the river Satluj has, however, greatly restricted the migration of fish in the river. Consequently, the breeding of fish has been affected to a great extent. The fishery wealth in the river is thus decreasing day by day. The unchecked fall of industrial and city waste from Ludhiana in the Budha Nala has also adversely affected the fish in this stream. A lot of fish die due to this waste which also hampers to a great extent the migration of fish. If no suitable measures are adopted against the fall of polluted water in the Budha Nala, it may result in great loss to its fishery wealth.

There is a great scope for pisciculture in the impounded waters. A survey conducted by the State Department of Fisheries has revealed that there are about 1000 acres of water area in the form of village ponds and other impoundments available in the district. These can be made suitable for fish culture. Out of this, about 125 acres have already been brought under fish culture. Indian Major carps, such as *Catla catla, Cirrhina mrigala and Labeo rohita* are extensively used for stocking in the village ponds. Mirror carp and allied species are also being introduced for culture. Growth of fish in these waters is noted from time to time and in case of retarded growth, manures are applied to the water. As soon as the fish attains marketable size, it is put to open auction.

The fish production of the district is about 100 tonnes per year. In 1963-64, the district was at the top in the State for the production of fish reared from village ponds. The Government revenue from the auction of fishing rights is about Rs. 25,000 per annum.

A detailed list of the different species of fish, available in the district, is given in the Appendix at the end of the chapter I, 'General'. at pages 47 to 52.

The promotion of fisheries was previously looked after by the Director, Animal Husbandry and Warden of Fisheries, Punjab. But in 1963, the Department of Animal Husbandry and Fisheries was bifurcated and a separate department under the charge of Director and Warden of Fisheries was set up. In the district, the department is represented by two Fisheries Officers, one each at Ludhiana and Samrala, who are assisted by 4 Field Assistants and 3 Fishermen, and 2 Field Assistants and 2 Fishermen, respectively.

The main activities of the department are conservation of fishery resources and development of fisheries. The conservation aspect is looked after by keeping check on the activities of poachers and those indulging in unlicensed fishing as well as in the harmful methods of fishing such as dynamitting and poisoning of public waters[14]. The licensees are allowed to catch fish under

14. There are in force mesh regulations, size restrictions and close seasons (months of July and August) under the Punjab Fisheries Act, 1914, and the Indian Fisheries Act, 1897.

the rules framed under the Punjab Fisheries Act, 1914, so as to eliminate indiscriminate fishing and save fisheries, which form a natural asset, from annihilation. In order to give fillip to the fishing industry and to ensure regional self sufficiency, the village ponds which, in their existing neglected condition, form only breeding places for mosquitoes and thus prove an eye sore to the picturesque village surroundings, are stocked with fish seed collected from natural spawning grounds.

(xv) Animal Diseases and Veterinary Hospitals

Animal Diseases.—Although a comprehensive effort has been made to control and reduce the incidence of veterinary diseases, they continue to reduce the vitality and working efficiency of animals. The common animal diseases prevalent in the district are haemorrhagic septicaemia, black quarter, foot-and-mouth disease, rinderpest and parasitic disease. Haemorrhagic septicaemia causes heavy loss to the livestock. It occurs in the low-lying and marshy area after rains in August, September and January. All the animals are vaccinated as a prophylactic measure before rains to ward off the incidence of the disease. Prophylactic vaccination has proved very successful in controlling the outbreak of the disease. The outbreak of black quarter is controlled with black quarter serum and vaccine. The foot-and-mouth disease generally breaks out in threshing season of crops and is cured by local treatment. Rinderpest is a highly fatal disease amongst the cattle. The Rinderpest Eradication Scheme, launched during the Second Five-Year Plan, aimed at eradication of the disease by immunising the entire cattle population through mass scale vaccinations and inocculations in the villages.

Veterinary Hospitals.—There is a net work of 19 veterinary hospitals, each under a Veterinary Assistant Surgeon, 8 permanent outlying dispensaries, each under a Veterinary Compounder, and other veterinary institutions in the district, as under :

Veterinary Hospitals and Permanent Outlying Dispensaries in Ludhiana District

Veterinary Hospitals	Permanent Outlying Dispensaries
1	2
Tahsil Ludhiana—	
1. Ludhiana }	1. Dhamot
2. Sahnewal }	2. Nurpur Bet

(contd.)

1	2
3. Ka'ani Kalan	3. Rauni
4. Dehlon	4. Ghaloti
5. Gujarwal	5. Qila Raipur
6. Malaudh	
7. Dakha	
8. Doraha	
Tahsil Samrala—	
9. Samrala	6. Raipur Majri
10. Khanna	
11. Isru	
12. Machhiwara	
13. Khamanon Kalan	
Tahsil Jagraon—	
14. Manoki	7. Bassian
15. Ghalib Kalan	8. Sidhwan Kalan
16. Sadhar	
17. Sidhwan Bet	
18. Raikot	
19. Jagraon	

There are also a good number of temporary outlying dispensaries attached to the nearest veterinary hospital. These are regularly visited by veterinarians on fixed dates to attend to the ailing animals.

Besides the above, there are a number of self help veterinary dispensaries, managed by village panchayats and block samitis, on 50 : 50 basis.

(e) **Forestry**

(i) **Importance of Forestry in the Economy of the District.**—The area under regular forests in the district is very small. The process of consolidation of holdings has further led to the cutting of trees in large numbers. Under the grow-more-food campaign most of the culturable waste land has also been reclaimed and brought under the plough. To augment their income, the village panchayats have been eager to bring the culturable common land under cultivation. Thus only such area as is quite poor, where cultivation does not appear to be economical, is given to the Forest Department for afforestation.

Indiscriminate cutting of trees has been the main cause of scarcity of fuel in the country side. The rural population has perforce to meet their domestic fuel needs with cowdung cakes which, if used as manure, would increase the fertility and productivity of soil.

After the partition of 1947, there arose an acute shortage of fuel resources in the State. Steps were taken to bring more Government land under the control of the Forest Department for raising fuel and economic plantation thereon. Consequently in 1951, the railway and national highway strips, and in 1956 the P.W.D. road strips and canal strips were transferred to the Forest Department for p'antation purposes. Besides controlling the spread of desert and other soil conservation works, the Forest Department aims at increasing the timber, fuel and fodder resources by afforesting State and private land. During the Vanmahotsava Week in the first week of July every year, a large number of fruit trees, timber and other trees are planted.

The forests in the district are of only secondary importance. The areas mostly include rail, road and canal strips. The area under forests in the district is classified, according to legal status, as 'Reserved' and 'Protected'. Reserved Forests are permanently dedicated either to the production of timber or other forest produce and in them the right of grazing and cultivation is seldom allowed. In protected forests,[15] these rights are allowed subject to certain restrictions.

The reserved forests, covering an area of 1 square kilometre, are situated near Ludhiana. These are mainly of scrub type and are maintained for the supply of fuel wood to meet the demands of local population. These forests are being felled gradually and are being replaced by more valuable plantation, such as *shisham* and *toot* (mulbery) in order to meet the growing demand of timber and sports industry.

The protected forests cover an area of 41 square kilometres and include all rail, road and canal strips in the district. *Shisham* is being raised for the supply of timber and fuel wood.

15. The forests were declared protected,—*vide* Punjab Government Notification No. 1122-Ft-58/1195, dated the 3rd May, 1958.

The area under the control of the Forest Department under different categories in the district, during 1965-66, was as under :

Particulars	Area (acres)
(i) Reserved Forests	197
(ii) Protected Forests	2,902
Rail Strips	1,378
Road-strips	2,522
Canal-strips	3,273
(iii) Area notified under section 38 of the Indian Forests Act, 1927	—
(iv) Area notified under sections 4-5 of the Land Preservation Act, 1900	—
Total	10,272

(*Source* : Divisional Forest Officer, Ludhiana, Forest Division, Phillaur)

(ii) **Forest Produce.**—The forest produce is classified into major and minor produce. The major produce includes timber, which is auctioned annually, whereas minor produce includes grasses and fire-wood, etc. The annual income from the sale of forest produce in the district during 1961-62 to 1965-66 was as under :

Year	Major Produce (Rs.)	Minor Produce (Rs.)
1961-62	1,61,514 ·00	42,446 ·25
1962-63	2,40,538 ·00	31,130 ·00
1963-64	2,07,109 ·00	21,080 ·00
1964-65	3,524 ·00	78 ·02
1965-66	2,36,467 ·00	53,271 ·63

(*Source.*—Divisional Forest Officer, Ludhiana, Forest Division, Phillaur)

(f) **Floods**—

Since early times floods in the river Satluj caused tremendous damage to crops and houses in the district. In 1947 quite a good portion of the district was affected by floods. A severe flood occurred again in 1955. There were floods almost every alternate year. On the construction of the Bhakra Dam on the Satluj the danger of floods has considerably decreased. However, floods are still caused by obstructions in the natural flow of water on account of consolidation of holdings, ill planned system of drainage of water under the roads, canals, etc. To overcome this menace, drainage system has been started, and link and field drains are being dug in a systematic way. The ring bunds constructed on the canals and the river Satluj have checked the floods to a considerable extent.

The following table shows the damage caused by floods and heavy rains in the district from 1961 to 1966:—

Damage Caused to Crops and Houses by Heavy Rains and Floods in Ludhiana District, 1961—66

Year	Damage to crops			Damage to houses		Human lives lost	No. of cattle lost	No. of villages affected
	Area affected (acres)	Produce damaged (mds.)	Value of damage (Rs.)	No.	Value (Rs.)			
1	2	3	4	5	6	7	8	9
1961	613	5,028	54,950	—	—	—	—	2
1962	3,14, 192	19,22,321	4,09,21,952	479	60,550	10	—	831
1963	10,189	50,669	13,67,724	49	15,200	2	—	39
1964	85,046	10,20,751	1,83,98.000	156	64,000	1	—	299
1965	——No floods——							
1966	——No floods——							

(*Source*.—Deputy Commissioner, Ludhiana).

To afford relief to the flood-affected people, the Government has taken various measures, viz., remission of land revenue and *abiana*, suspension of recovery of government dues, remission of electricity charges due from owners of tubewells, advance of *taccavi* loans to cultivators for purchase of seed, fodder, fertilizers, bullocks and implements, grants for repair of houses damaged by floods, free supply of food in flood-affected villages, pumping out standing water from fields and *abadis*, free supply of boats to marooned villages, cash grants for food and other necessities and provision of tents for people evacuated from flooded areas, etc.

(g) **Famines.**—The geographical situation of the district is such that rainfall is generally sufficient for raising normal crops. The irrigation facilities, available in major portion of the district, are also quite sufficient. Exceptions are, however, there when due to failure of rains the production decreased and scarcity was caused, but famine in the real sense has seldom occurred since the famines of A.D. 1783 and A.D. 1812-13. Scarcity was experienced during the years 1833, 1837, 1860-61, 1869-70 and 1877-78.

Famine of A.D. 1783.—"The earliest famine of which men still talk is that of Sambat 1787 [A.D. 1730]. The memory of it is preserved in the saying *satassiake maria hua*, applied to a man who has got food and refuses to feed a starving beggar; but.. no particulars (are forthcoming) as to how the people lived, or what was the extent of its ravages. There was drought in 1759 [A.D.] and again in 1770 [A.D.], but apparently no famine; and the effects were only felt for a few months. The memory of these visitations has been effaced by that which followed.

"The terrible famine of Sambat 1840 [A.D. 1783], called *chalia*, appears to have spared no part of northern India, and this district suffered with the rest of the country. It began with the failure of the autumn rains of Sambat 1839, there being little or no yield in the *kharif* and following *rabi* harvests. Prices rose from Bhadon (Sambat 1839), and by Baisakh (Sambat 1840) wheat was selling at 20 *seers kachcha* (8 *seers pakka*) a rupee. Rain fell in Har, but not afterwards; and the *kharif* crops of Sambat 1840 all withered. In Katak of that year wheat was at 8 *seers kachcha* (3½ *seers pakka*) a rupee; and if we consider the difference in the value of money then and now [1883] we may realize the extent of calamity from this. The *rabi* was not sown except at the wells, of which there were not nearly so many as now [1883]. In Chet Sambat 1841 there was rain, and in Har the usual autumn falls began. The *kharif* and *rabi* following were very good. The pressure of famine lasted nearly 2½ years altogether, and the mortality must have been tremendous. Grain could not be bought for money; and people are said to have died with bags of rupees under their heads. All natural affection was lost sight of, and parents robbed their children of their food, and were callous enough to see them die. Many emigrated beyond the Yamuna where there appears to have been something to live on.

People are even said to have been driven to cannibalism. The cattle died everywhere; and, when the rain did come, men had to drag the plough through the fields. The green crop was eaten whenever the heads were formed, and many people lost their lives from sickness brought on by improper food. Famine was as usual followed by disease. The people appear to have been able to resume the cultivation of their land and the country gradually recovered its prosperity; but the horrors of the *chalia* will long be remembered. It is worthy of remark that not a single village was totally deserted in this famine. Proprietors abandoned their land here and there, and many must have died; but the mass of them adhered to their villages, probably in most cases because there were wells at which the survivors could take out some sort of existence. The history of no village.. contains any allusion of its having been deserted at this time; and the few that date their foundation from a later period than the *chalia* were settled by the ruler of the time in the surplus area of some old village contrary to the wishes of the rightful owners[16]".

Famine of A.D. 1812-13.—"The *kharif* of Sambat 1868 and the *rabi* following were poor, and fodder scarce. Rain fell at first, but stopped, and the *kharif* of Sambat 1869 and *rabi* succeeding failed, except at the wells. Grain rose to 18 seers *kachcha* (7 seers *pakka*); and straw was not to be had. There was a tremendous loss of cattle, and oxen ceased to have any value, being given away for nothing, or turned loose in the fields. The autumn rains of Sambat 1870 [A.D. 1813] were good, and prices fell. The loss of human life was not perhaps very great, and was confined to the poorer classes, labourers and artisans, in the towns and villages[17]".

Scarcity conditions of A.D. 1833 and 1837.—"The history of the *nabia* or scarcity of Sambat 1890 [A.D. 1833] is as follows :—Grain was selling at two maunds (*pakka*) a rupee when it began. The autumn rains of Sambat 1890 failed; and the two harvests produced almost nothing except at the wells, where carrots..(and other vegetables were grown). The loss of human life and of cattle appears not to have been considerable; and the price of gram was never higher than 17 seers *pakka*; but this was of course very dear for those times, and would mean eight or ten [seers a rupee] now [A.D. 1883]. In Sambat 1894 [A.D. 1837] there was a scarcity, but not of much severity. The people had not, however, recovered from the 'ninety'. Witness the couplet:—

'*Nawe thon bache chouranwe ne mare; Dine badal ratin tare*'.

'Saved from the 90 (1833 A. D.), succumbed to 94 [1837 A. D.]; there were clouds by day and starry nights[18]".

Scarcity conditions of A. D. 1860-61; "[16]The *rabi* of Sambat 1917 [A. D. 1860] was poor, the

16. *T. Gordon Walker, Final Report on the Revision of Settlement of the Ludhiana District,* 1878-83, pp. 122-23.

17. *Ibid*, p. 123.

18. *Ibid*.

winter rains having failed; and the price of wheat rose to 34 seers *pakka* by Baisakh. There was rain in Har, but not in the following months; and the *kharif* was sown, but withered. There was a great drain on the grain stores of this district, caused by the scarcity in those to the south; and the price of wheat rose till it reached at one time to seven or eight seers a rupee. The *rabi* was very poor, but did not fail entirely; and the rains of [Sambat] 1918 [A. D. 1861] were plentiful. There was a great scarcity of fodder and considerable loss of cattle; but none of human life from actual starvations, in the villages at all events. It was a famine in the Bangar country (Rohtak, Hissar, & c.), and numbers flocked northwards from those parts. Our people say '*kal Bangar thon upje bura*', 'a famine coming from the Bangar is bad. 'The stores of grain were sold at an immense profit, which probably more than compensated for the loss of cattle. The scarcity of Sambat 1917 [A.D. 1860] will be found to be the turning point in the fortunes of many agriculturists of the western and Jangal villages. Most of them had grain in store; but the unlucky few that had not were compelled to incur a debt of which they have never got rid. Mortgages in Jagraon Tahsil can as often as not be traced back to the "17" ('*satarah*') or the following "25" ('*panji*'). There was some acute distress amongst the lower classes in the towns; but the whole famine expenditure appears to have amounted only to about Rs 6,000; and, although a suspension of 3 per cent of the revenue was considered necessary, the balance was realised at once. Captain (afterwards Colonel) Mc Neile writes in 1861 [A.D.] that the money-lenders were complaining that the Jats had paid off all their debts and taken the grain trade completely out of the hands of the regular merchants[19]."

Scarcity of A.D. 1869-70. : "The scarcity of 1869-70 was, as regards this district, of much the same character as that of 1960-61; but the harvests were better, and the injury done was confined to a not very considerable loss of cattle, and to debt incurred by individuals from this cause or from their having to purchase grain for food. Wheat went as high as eight or ten seers a rupee; but the people affected by this were as usual the artisans and labourers in the towns. There was on both occasions a good deal of immigration from the south of starving people. The whole expenditure on relief works was Rs 7,000 (incurred) entirely in the towns. On the other hand the mass of the agricultural population, at all events of the western parts of the district where the effects of famine ought first to be felt, profited greatly by the high prices as in 1860; and ....the advantage to them as a whole far outweighed the evils. Nominal suspensions to the amount of Rs 2,500 were sanctioned ; but (the balances) recovered next year[20]."

Scarcity of A.D. 1877-78. : "In the reports of 1877-78 Ludhiana is shown as 'unaffected'. The harvests were very fair; but prices were run up to famine rates in consequence of the demand from the North-Western Provinces, Madras and Bombay. This was to the entire benefit of the cultivator, and to such as had stores of grain[21]."

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19. *Ibid.*, pp. 123-24.
20. *Ibid*, p. 124.
21. *Ibid.*

APPENDIX I

(*Vide*,—*pages* 201—206)

Area under Principal Crops in Ludhiana District

(Thousand acres/hectares)

Crops	1950-51 Thousand acres	1955-56 Thousand acres	1960-61 Thousand acres	1961-62 Thousand acres	1962-63 Thousand acres	1963-64 Thousand acres	1964-65 Thousand acres	1965-66 Thousand acres	1965-66 Thousand hectares
Cereals									
Rice	1	1	2	4	3	6	8	12·6	5·0
Jowar	2	1	1	1	(a)	1	—	0·5	0·2
Bajra	8	4	3	2	1	2	2	3·0	1·2
Maize	70	70	96	98	105	124	124	132·5	54·6
Wheat	218	259	279	286	265	338	373	374·9	151·7
Barley	6	7	6	7	8	7	10	21·7	8·8
Pulses									
Gram	143	134	126	125	75	101	91	69·4	28·1
Mash	8·0	5·9	3·3	2·6	2·0	2·7	3·7	3·7	1·5
Moong	3·6	2·6	0·5	0·4	1·9	0·1	0·2	0·2	0·1
Massar	1·0	0·3	—	0·2	0·3	—	0·2	0·2	0·1
Oilseeds									
Groundnut	53·6	65·0	67·0	71	81	119	130	132·9	53·8
Rape and Mustard	8·1	5·0	3·0	3	3	3	5	3·5	1·4
Sesamum	0·7	0·2	0·1	0·1	0·1	0·1	0·2	0·2	0·1
Linseed	0·7	0·3	0·7	0·8	0·9	1·1	1·2	1·0	0·4
Other crops									
Sugarcane	18	19	24	25	21	33	32	40	16
Potatoes	0·4	0·1	0·5	0·9	1·4	0·8	1·5	2·0	0·8
Cotton (American)	6	62	39	32	35	43	30	29·4	11·9
Cotton (*Desi*)	29	15	25	42	40	53	52	46·7	18·9

Note.—(a) denotes less than 500 acres.

(*Statistical Abstract of District Ludhiana, 1963, pp 36-47, Statistical Abstracts of Punjab, 1962, 193, 1964, 1965 and 1966*)

APPENDIX II

(*Vide,—pages* 201—206)

Production of Principal Crops in Ludhiana District

(Thousand tons/metric tonnes/cwt.* / bales**)

Crops	1950-51 Thousand tons	1955-56 Thousand tons	1960-61 Thousand tons	1961-62 Thousand metric tonnes	1962-63 Thousand metric tonnes	1963-64 Thousand metric tonnes	1964-65 Thousand metric tonnes	1965-66 Thousand metric tones
Cereals								
Rice (paddy)	1	1	3	3	2	3	4	4
Jowar	(a)	(a)	(a)	—	—	—	—	—
Bajra	1	1	(a)	(b)	—	1	(b)	1
Maize	18	28	55	83	49	83	73	136
heat	102	108	165	179	188	269	337	285
Barley	2	3	2	4	3	3	6	11
Pulses								
Gram	37	34	54	57	25	32	46	20
Mash	1·0	0·5	0·5	0·41	0·3	0·5	0·5	0·7
Moong	0·5	0·2	0·1	0·10	0·30	—	—	0·1
Massar	0·2	—	—	0·10	—	—	0·1	0·6
Oilseeds								
Groundnut	15·2	23·0	24·8	26	30·45	40·8	79·7	80·1
Rape and Mustard	1·6	1·0	0·5	1·22	0·60	0·5	0·9	0·7
Sesamum	*1·3	*0·4	*0·2	0·03	0·01	0·02	0·2	0·04
Linseed	0·1	(a)	0·1	0·20	0·21	0·2	0·3	0·3
Other crops								
Sugarcane (*gur*)	26·0	27·0	38	36	31	48	38	63
Potatoes	1·1	0·8	3·9	5·08	10·6	5·3	10·4	14·4
Cotton (American)	**(a)	**25·3	**21	3·91	4·15	5·42	4·14	3·70
Cotton (*Desi*)	**12·0	**5·0	**14	6·40	4·91	6·54	6·84	5·81

(*Statistical Abstract of District Ludhiana*, 1963, pp. 48-51; *Statistical Abstracts of Punjab* 1962, 1963, 1964, 1965 and 1966)

Note.—(a) denotes less than 50 tons.

(b) denotes less than 500 metric tonnes.

Except those of *sesamum (which are in cwt. for 1950-51, 1955-56 and 1960-61) and **cotton (both American and *Desi* which are in thousand bales for 1950-51, 1955-56 and 1960-61), production figures of all other crops are in thousand tons for the year 1950-51, 1955-56 and 1960-61, and thousand metric tonnes for the remaining period, i.e. 1961-62 to 1965-66.

APPENDIX III

(*vide page* 201—206)

Yield Per Acre of Principal Crops in Ludhiana District

(lbs)

Crops	1950-51 (lbs.)	1955-56 (lbs.)	1960-61 (lbs.)	1961-62 (lbs.)	1962-63 (lbs.)	1963-64 (lbs.)	1964-65 (lbs.)	1965-66 (lbs.)
Cereals								
Rice (paddy)	—	1,187	1,365	1,680	1,018	1,344	1,102	714
Jowar	—	95	153	159	—	142	—	—
Bajra	269	301	205	210	—	626	375	830
Maize	576	909	1,273	1,864	1,017	1,480	1,350	2,197
Wheat	1,038	939	1,324	1,372	1,561	1,756	1,992	1,673
Barley	747	1,070	955	1,280	840	850	1,338	1,041
Pulses								
Gram	580	568	955	1,003	707	708	1,111	649
Mash	292	197	355	—	—	—	—	—
Moong	331	172	347	—	—	—	—	—
Massar	419	329	459	—	—	—	—	—
Oilseed								
Groundnut	635	792	831	833	856	756	1,350	1,330
Rape and Mustard	437	449	440	—	—	—	—	—
Sesamum	247	214	319	—	—	—	—	—
Linseed	513	329	482	—	—	—	—	—
Cash crops								
Sugarcane (*gur*)	3,236	3,225	3,494	3,146	3,156	3,206	3,850	3,513
Potatoes	6,160	14,812	15,927	12,543	16,336	14,810	15,144	15,610
Cotton (American)	—	161	210	265	262	277	302	278
Cotton (*Desi*)	162	135	212	336	268	273	284	275

(*Statistical Abstract of District Ludhiana*, 1963, pp. 52-55; *Statistical Abstracts of Punjab*, 1962, 1963, 1964, 1965 and 1966)

सत्यमेव जयते

CHAPTER V

INDUSTRIES

(a) **Old Time Industries and Industrial Development of Ludhiana.**—The district cannot boast of any well-established old time industry. Even in medieval period, Ludhiana neither formed the seat of provincial government nor served as the district headquarters. As late as in the reign of Akbar, Ludhiana could merely claim the status of a *Mahal.* Sirhind, on account of traditional importance of the place, continued to eclipse Ludhiana and environs. In the eighteenth century Raikot became the seat of the famous house of the Rais. Handicrafts around Raikot must have enjoyed the patronage of the Rais. Similarly certain handicrafts must have flourished around Qila Raipur, the seat of Cis-Satluj chiefs. By the middle of 19th century, with the end of the political power of the Rais and the majority of the Cis-Satluj chiefs, handicrafts associated with Raikot and Qila Raipur became almost extinct.

After the annexation of the Punjab in 1849 A.D., Ludhiana and Jagraon had emerged as notable towns. Machhiwara and Bahlolpur were also old time centres responsible for maintaining the trade and commerce in the area. In Ludhiana, woollen industry had a start on a very small-scale. Woollen *chadars* and shawls were manufactured by Kashmiri refugees who had migrated and settled there consequent upon acute economic distress in the valley in the thirties of the 19th century. Superior pashmina shawls were also manufactured at Ludhiana. These were exported outside the district and even to foreign countries, e.g., France. *Lungis* and *patkas* were also manufactured. Embroidery work was done on *patkas,* pieces of cloth imported from Hoshiarpur. Owing to the stationing of military at Ludhiana the requirements of items of equipment, such as laces, badges and *kullas* were met locally. Naturally it gave impetus to handicrafts. Alongside the handloom industry in Ludhiana made rapid progress. Shirting cloth, popularly known as 'Ludhiana', was famous throughout the Punjab.

Early in the present century hosiery machines for knitting socks were installed at Ludhiana. The step facilitated the localisation of this industry. The emigrant Kashmiri labour had maintained the importance of handicrafts by manufacturing hand-knit gloves and other woollen accessories, viz., *chadars,* shawls and *namdas,* etc. After the World War I, foundry industry also made some headway. For casting work Ludhiana was earlier dependent on Lahore, but the number of units engaged in foundry work was fast increas-

ing due to the localisation of hosiery industry, for which these units did minor and major repair work.

Ludhiana was also well known for the manufacture of *desi juti* (country shoes), which were famous for lightness and durability. Local manufacturers mostly depended on local raw material collected from tanners. *Desi jutis* manufactured in Ludhiana were mainly exported. Even after the introduction of western-type shoes the industry did not sudden'y disappear though it lost its past speciality of lightness and durability on account of competition from outside. Even now-a-days *desi jutis* (upper of chrome/*phauri*) are manufactured for export to other districts where there is considerable demand for the traditional type of foot-wear.

Before partition hosiery and foundry industries were established on sound footing. Handloom industry was replaced by power-loom industry. The other old time industries faced elimination as a result of growing popularity of machine made goods.

Earlier Jagraon formed a part of Rai territory. By the middle of 19th century ivory work industry had been established at the place. Certain Quaraishi professional turners (*churigars*) were engaged in the manufacture of ivory bangles mainly worn by the brides at the wedding. The farm-carts required for transport were also manufactured as the raw material was available locally in abundance. Gradually ivory work in the town lost importance. In the beginning of the twentieth century the Grain Market was established in Jagraon town (1906) due to heavy agricultural produce in the surrounding areas. With the increase of cotton crop grown around Jagraon, cotton ginning industry was started at the station. Wooden-carts continued to be manufactured though to a lesser extent. '*Sirkis*''—reed covers were also manufactured, but their demand diminished due to the construction of pucca houses. After partition of the Punjab in 1947 the cotton ginning industry continued unabated. During the fifties agricultural implements also began to be manufactured in Jagraon.

Machhiwara, an ancient town, enjoyed a good deal of importance in the 19th century. *Khand* and *bura* were manufactured by Khatris of the area. As a result of improved transport facilities, opening of railways and import of crystal sugar from abroad in the beginning of the 20th century, the importance of this local industry considerably lessened. The opening of sugar mills in India gave the industry a further jolt. Finally as a result of the migration of Muslims from Machhiwara after partition the *khand bura* industry completely stopped.

Bahlolpur, too, was a flourishing town up to the middle of the 19th century. Muhammadan weavers were manufacturing *lungis* and *patkas*

for local needs and also selling outside the town. With the sudden set back to the town in 1947 A.D. the weaving industry also suffered. It became practically extinct consequent upon migration of Muhammadans to Pakistan.

Khanna itself was a small town ; but the area around was well known for growing cotton. Cotton was marketed from Khanna and transported with great difficulty on bullock-carts and then by river to Karachi and overseas. With the opening of the railways and starting of the cotton-ginning mill at the place in 1905 the hurdle of transport was removed. In the third decade of the current century cultivators of the area switched over from cotton to groundnut cultivation. The necessity of extracting oil, instead of exporting groundnut, further facilitated the opening of oil mills. Consequently, oil and cotton ginning mills were started in the area. The situation of Khanna on G.T. Road has induced the enterprising businessmen to set up steel re-rolling industry. At the time of partition there were only 4 oil and cotton ginning mills and one steel re-rolling mill with promising expansion chances.

The First Five-Year Plan (1951—56) was an agricultural plan, but the Second and Third Five-Year Plans had a distinct industrial bias. During the Second Five-Year Plan period, Government of India surveyed the industrial potential of the country and paid special attention to the development of industries still in the stage of infancy. These industries were afforded protection by restricting imports and in certain cases imports were stopped altogether. These steps were coupled with other incentive benefits, viz., by giving cheap land for factories and advancing loans to the industrialists. The Second Five-Year Plan period proved to be a boon for the rapid development of the existing industries and also for opening of new industries. Industrial Areas 'A' and 'B' of Ludhiana developed enormously during this period and many new industries, viz., cycle-parts, sewing-machines, machine-tools, diesal engines and spare motor-parts (chessis parts only) were developed and established on sound footing during this period. In the Third Five-Year Plan period in addition to the aforesaid industries, woollen textile, hosiery and wool spinning industries registered remarkable development. Side by side Government continued the policy of state-aid to industries and advancement of loans, etc. The Government of India also allowed the import of essential machinery on the recommendations of the State Government.

In order to provide facility of grading, sampling and precision—most essential for maintaining the required standard of manufactures—the State Government opened the Quality Marketing Centres for textiles and machine-tools. To meet the shortage of trained technical personnel, the State Government started the Industrial Training Institute. The Government of India did not lag behind in affording facilities and opened the Industrial Training

School for providing technical hands. They also opened Directorate of National Productivity Council and Small Industries Service Institute at Ludhiana. The favourable circumstances and sustained efforts of new entrepreneur have made Ludhiana the premier industrial city in the State, particularly in the small-scale sector.

(b) **State Aid to Industries.**—The Punjab Government has given a very high priority to schemes of industrial development. The industrial base of State's economy expanded considerably during the 15-year period covered by the first three Five-Year Plans from 1951 to 1966. In the Fourth Five-Year Plan about 6 per cent of the State's outlay is being spent on industry as compared to about 5 per cent average of all the States in the country.

The Government has undertaken to help industrialisation and industrial activities in various ways. As an incentive to the new industrial ventures which may be set up in and around the approved focal points, the Government offers concessions regarding land, finance and capital, power, taxation, feasibility studies, preference in store purchase and building materials. Besides, the Department of Industries provides financial assistance for the development of industries in the form of loans and grants (subsidies and grants-in-aid) to the industrialists under the Punjab State Aid to Industries Act, 1935[1].

The Punjab State Aid to Industries Act, 1935, was amended suitably after 1947 for advancing loans up to Rs 1,000 against a certificate of credit-worthiness in the case of village artisans and craftsmen.

[1]. The amounts thus advanced in Ludhiana District, during the ten years from 1956-57 to 1966-67, are given below :

Year	Loan	Subsidies and grant-in-aid
	Rs	Rs
1956-57	23,06,600	3,700
1957-58	7,24,700	1,000
1958-59	4,10,900	1,500
1959-60	2,86,725	—
1960-61	2,81,800	2,000
1961-62	2,51,300	3,000
1962-63	3,16,000	3,300
1963-64	2,38,500	2,000
1964-65	5,75,200	—
1965-66	28,32,220	—
1966-67	11,57,200	400

The Punjab Financial Corporation provides financial assistance to large and medium-scale industries. The State Bank of India also advances loans to small-scale industrialists against the security of raw material, finished goods, etc.

Other measures taken for the promotion of industries in the district are:

Supply of Machinery on Hire-Purchase Basis.—The National Small Industries Corporation, an agency founded and controlled by Government of India, supplies machinery to small-scale units on hire-purchase basis under easy terms on the recommendations of the State Government. The cost of the machinery and equipment is realised in convenient instalments spread over a number of years, after an initial payment of 20—40 per cent of the total amount.

Supply of Raw Materials.—The Industries Department arranges procurement and distribution of raw materials like copper and zinc, etc., to quota holders and deserving industries.

Marketing Assistance.—To provide marketing facilities to cottage and small-scale industries the State Government has started a number of emporia. The Government also organises industrial exhibitions from time to time at suitable places inside the State and outside it.

सत्यमेव जयते

Quality Marking Scheme.—After the partition of 1947, the Punjab has made remarkable progress in the development of small-scale industries. The products of small-scale industries, however, lacked uniformity in respect of quality, precision and standardisation, since these units could not afford to instal modern equipment for testing raw materials, semi-finished and finished products, etc. To overcome these difficulties, the State Government embarked upon an ambitious programme of providing facilities for manufacturing, finishing and testing their products as well as for technical guidance to standardise them.

The Quality Marking Scheme was thus launched during the Second Five-Year Plan (1956—61) and was further extended in the Third Five-Year Plan (1961—66). Under this scheme, the manufacturers are provided free testing facilities, technical guidance, manufacturing data, designs and specifications. The products manufactured according to standard specifications laid down under the scheme are quality marked.

At Ludhiana the following Quality Marking Centres[2] have been set up for light engineering products, machine-tools, hosiery-goods, dyeing and calico printing:—

(i) **Quality Marking Centre for Textile Goods.**—Quality Marking Scheme was also introduced for textile goods with a view to creating a special taste in the buyer to purchase only standard goods. To begin with, in 1956, two separate centres were started at Ludhiana, viz., (i) Quality Marking Centre for Hosiery Goods, and (ii) Quality Marking Centre for Dyeing & Printing. These were amalgamated in June, 1964, under the name Quality Marking Centre for Textile Goods, Ludhiana.

Among textiles, woollen hosiery is the main industry of Ludhiana. This Centre has got on list 298 firms and certifies the quality of hosiery goods produced by them for civil, export and defence supplies.[3]

Samples of approved qualities of various types of hosiery goods, covered by the scheme, are kept in the custody by the Centre, and specifications are laid down for such products.

The Centre has a well-equipped modern textiles testing laboratory, controlled by well-qualified technical staff. Annually over 25,000 types of tests are performed and goods worth over rupees one crore are quality marked.

(ii) **Government Quality Marking Centre for Engineering Goods.**—It was set up in 1962 for quality marking of engineering goods, export inspection work, and inspection of standard goods purchased by the Controller of Stores, Punjab.

The Centre affords the following facilities to the small-scale industrial units under its jurisdiction free of charge. These benefits are also available to non-members (i.e., units not registered with the Centre) on nominal charges fixed by Government:—

(i) Testing of raw material, semi-finished and finished products, as per standard specifications laiddown for them, for the purpose of approval of samples and their certification as standard goods.

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[2]The sphere and scope of Quality Marking, already existing in Ludhiana, will be expanded and rupees two lakhs will be spent in the Fourth Plan period.

[3]During the year 1965-66, goods, both textiles and hosiery, worth Rs 1,12,06,410 were quality marked by this centre. The important hosiery items quality marked are gents' slip-overs, pullovers, cardigans, jersies, gents and ladies knitted-coats, socks, stockings, gloves and machine knitted childrens' sweaters. Besides, various kinds of printed textiles, handloom cloth and other handloom products, which are according to specifications, are also quality marked.

(ii) Technical guidance regarding production of standard goods conforming to the desired specifications, selection of proper raw materials, testing and standardization methods and techniques.

(iii) Framing and supplying of standard specifications to the interested parties and advice for the adoption of the same to other units registered with the Centre.

(iv) Provision of proper facilities for the supply of design/drawings and experimentation facilities for producing new types of goods/equipments under the free supervision of properly qualified staff.

(v) Free publicity to quality-marked products and their manufactures.

(vi) Provision of expert technical guidance for the production.

(vii) Preparation of new schemes in consultation with experts and experienced parties for new units to encourage them to produce items which substitute the imported goods and to offer all sort of technical assistance and guidance in this regard free of charge.[4]

(iii) **Inspection/certification of goods meant for export.**—The State Government have, in consultation with the Department of International Trade, Government of India, undertaken inspection/certification of goods meant for export from the State, through the agency of Quality Marking Centres set up for various types of industries.

As a result of the activities of the Quality Marking Centres and the technical assistance rendered to the industrialists, the quality of the products has considerably improved and the products are being gradually standardised.

4. Particulars of the work done by the Centre up to the end of year 1965-66 are given below :

Particulars	Light Engineering section	Machine Tools Section	Total
Total No. of parties registered up-to-date	47	57	104
No. of machines quality marked during 1965-66	97,047	167	97,214
Value of machines quality marked during 1965-66	Rs 57,92,234	Rs 17,49,900	Rs 75,42,134

Common Service Facility/Development Scheme.—In the machine tool industry certain spare-parts entail highly specialised skill and require up-to-date imported machinery. The manufacturing of such parts with requisite precision and finish, etc. is beyond the capacity of small-scale entrepreneur. Moreover, it is uneconomical. To remove this handicap Government have set up a chain of Development and Testing Centres as well as Common Facility Centres to provide technical assistance and common facility services to the small-scale industry. The testing facilities are made available at very nominal charges with a view to promoting quality consciousness and development of industry.

Of the various centres established for this purpose in the State, the following are located in Ludhiana :—

(i) Government Testing and Finishing Centre.

(ii) Government Textile Finishing Plant.

(i) **Government Testing and Finishing Centre.**—The organisation is one of the Common Facility Centres established by the State Department of Industries in 1956, primarily to cater to the needs of small-scale manufactures producing cycle and sewing machine parts. The centre also serves other branches of engineering industry like automobile, defence products, etc. It renders cheap service in heat treatment of metals, electroplating, enamelling and spray painting of engineering goods, chemical analysis, mechanical testing and metallography, and technical advice and other services to the industries in the Punjab and the adjoining States. The Centre is equipped with up-to-date machinery and helps the engineering industry in production and improvement of the standard quality of the products. It also assists the industry by giving technical advice and by helping small units to establish their own plants.[5]

(ii) **Government Textile Finishing Plant.**[6]—Located in the fort premises at Ludhiana, this Plant was established under the Common Facility Service Scheme in 1960-61 to meet the long-standing demand of the local textile industry for technical assistance in bleaching, dyeing and finishing of textile and hosiery goods for which small-scale units could not afford necessary facilities. Up.

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5. During 1965-66, the Centre rendered services to 5,617 parties and realised a sum of Rs 187,287 as processing charges,

The Centre is under a General Manager, assisted by one Senior Technical Officer, one Testing Officer, two Chargemen, two Technical Officers, besides about forty members of the technical and non-technical staff.

6. The Plant is under a Technical Manager, assisted by one Bolier Attendant-cum-Mechanic, one Finishing Technician, one Dyeing Technician, one Bleaching Technician, one Fitter, one Store Keeper, one Boiler Attendant-cum-Fireman, besides other ministerial and miscellaneous staff.

to June, 14, 1964, it remained attached to th Government Institute of Dyeing, Printing and Hosiery Technology, Ludhiana. The Plant was separated from the Institute in February, 1965. It provides facilities to all small units which are neither able to instal such heavy plants for getting their products processed, nor are able to get their goods finished from far off places like Amritsar, etc., at exorbitant charges.

Demonstrations are given to hosiery/textile industrialists to make them understand the modern techniques in dyeing, bleaching and finishing of textile goods. Besides, textile factories are visited and their owners are advised to improve the quality of goods on modern scientific lines.

Other Organisations for development of Industries.—Besides the above mentioned common service facility /development centres working in the district, there exist the following organisations for the promotion of industries in the district :—

(i) Small Industries Service Institute, Ludhiana ;

(ii) Mechanical Engineering Research and Development Organisation, Ludhiana ; and

(iii) Ludhiana Productivity Council, Ludhiana.

(i) **Small Industries Service Institute.**—Set up by Government of India in 1956, with 3 extension centres in the different parts of the region, the small Industries Service Institute, Ludhiana, has jurisdiction over the Punjab, Himachal Pradesh and Union Territory of Chandigarh.

The scope of the industrial extension service provided by the Institute included technical counselling, training, preparation and distribution of technical literature in he form of technical bulletins, drawings and designs, economic information service, industrial management advice, marketing, rendering common facilities in the workshop and laboratories of the Institute and its Extension Centres.

One of the major contributions made by these services is the improvement in the quality and finish of the goods produced by several industries. The second important feature of the work of the Institute is the shift in emphasis from the diversifications of technical counselling to intensive work on a few selected units to assist them to reach a stage of standardisation so that these may serve as model units.

The efforts of the Small Industries Service Institute for evolving new industrial techniques and improving the quality of industrial products of the small-scale industrial sector has produced wholesome impact on the functioning of

the industrial units in Ludhiana. As a result of these efforts, the products of some of the machine tool manufaturers at Ludhiana have achieved Grade I Standard of the Directorate General, Supply and Disposals, Government of India.

(ii) **Mechanical Engineering Research and Development Organisation, Ludhiana.**—Mechanical engineering comes in the forefront of applied economic research, since every production process or transport service depends mainly upon equipment, tools and organisation techniques developed by mechanical engineering. The engineering industries provide the backbone of developing agricultural production and also increased employment to the people through essential consumer industries and chemical plants.

With headquarters at the Central Mechanical Engineering Research Institute, Durgapur, the Mechanical Engineering Research and Development Organisation was established at Ludhiana in 1965 in order to provide regional centres at focal points of concentrated engineering industries in the country, to assess their research and development needs and provide engineering technology which is not otherwise available to them. One of its three centres, that have become operative, is at Ludhiana.[7] It started functioning in December, 1965.

The plan and programme at each centre is framed under the guidance of a Scientific Committee appointed by the Central Mechanical Engineering Research Institute, Durgapur. The Committee for Ludhiana Centre is headed by the Technical Adviser, Government of Punjab, Chandigarh.

The purpose of the organisation is to assist the Indian Industries to overcome their technical difficulties and establish sound production practices with acceptable quality of products.[8]

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7. The three centres of the Mechanical Engineering Research and Development Organisation in the country that have become operative are : Poona in the West, Ludhiana in the north-west and Madras in the south.

8. Certain fields of mechanical engineering have been identified as important for economic development of this region. Accordingly, the design and consultancy personnel of the Ludhiana Centre work in five groups ; Machine Tools, Jigs, Fixtures and Gauges ; Agricultural Diesel Engine and Automotive Parts Standardisation ; Pipeline and Pump Engineering ; Agricultural Machinery Development ; and Industrial Plants, Instrumentation Planning and Testing Techniques advisory group. The personnel of the organisation consists of 4 Mechanical Engineer Scientists, one Electrical Engineer Scientist, 12 diploma holders Scientific and Technical Assistants, and 10 other staff, Four German Volunteer Engineers and a few Indian Volunteer Engineers are also working in the design group. Shortly the personnel will be strengthened at higher levels and Research Fellowships will be instituted in the design groups to provide opportunity for specialised studies in the fields important for industrial development of the region. The funds of the organisation are provided by the Council of Scientific and Industrial Research, India. Suitable technical fees and royalties are charged for designs licensed and other technical services to the industry. The organisation is being assisted by the United National Development Fund, with the Assistance programme executed by the United Nations Educational Social and Cultural Organisation, in respect of expert guidance, personnel, training and specialised laboratory equipment to the tune of Rs. 76,00,000.

(iii) **Food Technology Research Centre, Ludhiana.**—Raw materials, food-stuffs, socio-economic structure and cultural patterns differ from region to region in the country. This diversity makes it imperative that research on foods (and their utilization) in different regions should be undertaken to clearly understand and exploit the potentialities of various parts of the country. The establishment of such research centres is expected to provide adequate opportunities for on-the-spot assistance and guidance both to the growers and the related industries through an integrated research and extension programme.

The idea of setting up of Food Technology Research Centres in different regions materialised in October, 1954, as a result of the deliberations of the Symposium held at the Central Food Technological Research Institute, Mysore, one of the National Laboratories under the Council of Scientific and Industrial Research. The Central Food Technological Research Institute had by 1963 established Regional Stations at Jammu, Simla, Nagpur, Lucknow, Bombay, Kodur and Trichur. Consequent upon the re-organisation of the research programmes of the Central Food Technological Research Institute in 1964, it was decided to merge the Simla and Jammu Stations. In 1965-66, the Study Team, which visited a number of places in Northern India for this purpose, finally selected Ludhiana as the venue for the combined Experiment Station.

The Punjab Government has donated a 5-acre plot of land adjoining the Mechanical Engineering Research and Development Organisation, Ludhiana, and has made an initial grant of Rs 50,000 for the construction of a building. As an interim arrangement, the Government have also provided rent-free accommodation (in Gill Park, Ludhiana) for the temporary housing of the Centre, which started functioning at the campus of the Guru Nanak Engineering College, Ludhiana, from February, 27, 1968. The scope of this Centre is to help initiate in the setting up and development of food industries in the region so as to meet all indigenous requirements and even aim at exports, where feasible.

Necessary steps are already underway to organise the Centre, which is to cater to the needs of the food industries of the region, consisting of the States of Punjab, Haryana, Himachal Pradesh, Delhi and Rajasthan. This new organisation holds promise of rapid development in the field. During the brief period of its working, valuable assistance has been rendered by the Centre both to the cultivator and the indusrty. It is envisaged that the Centre will, in due course of time, form the focal point of great importance not only to the food industries but also to the farmers and the marketeers.

(iv) **Ludhiana Local Productivity Council, Ludhiana.**—This is one of the 47 Local Productivity Councils formed by the National Productivity Council, (which was established by the Government of India in February, 1958) to generate

the Productivity Council. The Local Productivity Councils are tripartite organisations comprising employers, workers, Government and professional organisations.

The National Productivity Council conducts training programmes in the fields of industrial management, industrial relations and industrial engineering, and provides consultancy service to the individual organisations to demonstrate the benefits of these services.

Initially the National Productivity Council provided these services to the industries, but has now extended its area of operation to the fields of agricultural productivity and fuel efficiency.

The National Productivity Council provides these services through its six Regional Directorates, one of which is located at Ludhiana. These Directorates are manned by experts in the fields of industrial relations, industrial engineering and industrial management, fuel efficiency and agricultural productivity.

The jurisdiction of the National Productivity Council, Regional Directorate, Ludhiana, covers the States of Jammu and Kashmir, Punjab, Haryana, Himachal Pradesh, Rajasthan and Union Territories of Chandigarh and Delhi where there are established 9 Local Productivity Councils, of which one is at Ludhiana[9].

The Regional Directorate, Ludhiana, organises training programmes on subjects such as Materials Management, Marketing Management, Marketing Research, installation and operation of a system of Cost and Budgetary Control, Programme Evaluation and Review Technique (PERT), Work Study, Production Planning and Control, Preventive Maintenance, Quality Control, Plant Layout and Materials Handling, Wage Administration Incentive and Job Evaluation, Organisation and Methods (O and M), Cost Reduction, Fuel Efficiency, Personnel Management and Industrial Relations, Supervisory Development, Development of Small and Medium Scale Industries—Survey, Feasibility, Project Planning and Management Appreciation Course, Preventive Maintenance, Administrative Work Study, etc.

New, interesting, simple and productivity-oriented courses on kitchen gardening, floriculture and fruit, vegetable preservation and 'save stored grains from pests and rodents' have been developed in the field of agriculture.

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9. The nine Local Productivity Councils under the National Productivity Council, Regional Directorate, Ludhiana, are established at Ludhiana, Amritsar, Batala, Jullundur Sonepat, Faridabad, Jaipur, Srinagar and Delhi.

The Ludhiana Local Productivity Council was established in 1961.

A number of consultancy services have been conducted in this region regarding layout, inventory control, material management and production planning and control, etc.

(v) **Punjab State Small Industries Corporation, Ltd., Chandigarh** :— Ludhiana has been selected as one of the six depots of the Punjab State Small Industries Corporation, Ltd., set up in 1962 as a subsidiary of the Industries Department primarily for the purpose of procurement, storage and distribution of all types of raw materials needed by the small scale industries in the State.

(c) Industrial Training

The need for industrial training in a developing economy like that of India cannot be overrated. Although researches in science and technology have led to the introduction of automation in industry, it is obvious that for successful utilization of all researches, a team of skilled people is necessary. Their role in the efficient working of the automatic machines and their maintenance cannot be undersestimated.

The industrial training programme, with a view to providing skilled personnel for the factories, was initiated in India after the World War II (1939-45) as an employment measure for the demobilised personnel. The Government of India established some industrial training institutes in various parts of the country to train a few carpenters, blacksmiths, masons, linemen and wiremen and sheet metal workers.

After independence, the concept of establishing industrial training institutes underwent a considerable change. It was necessary not only to create more employment opportunities for the people but also to provide trained personnel for industrial undertakings established or proposed in the public and private sectors. This resulted in an all-round expansion in the training programme.

The industrial training programme in the Punjab also received an impetus under the Government of India's Programme. The Industrial Training Wing of the State Industries Department, imparts industrial, technical and vocational training to boys and girls through its various industrial training institutions and schools.

The institutions, providing technical guidance for starting new industries and imparting industrial training, in the district are as under :

(i) Industrial Training Institute, Ludhiana ;

(ii) Government Institute of Textile Chemistry and Knitting Technology, Ludhiana.[10]

(iii) Government Industrial School for Boys, Ludhiana ; and

(iv) Government Industrial School for Girls, Ludhiana.

10. For a description of the Government Institute of Textile Chemistry and Knitting Technology, Ludhiana, refer to the chapter on 'Education and Culture', pp 554-55.

(d) Industrial Areas and Estates

There are two Industrial Areas, viz., 'A' and 'B'[11] at Ludhiana. The area 'A' spreads over 161 acres and Area 'B' over 118 acres. These have a provision for 1,019 plots, of which a good number have been constructed upon and are being used by different industries.

The new Industrial Area at Dhandari measures over 144 acres.

The scheme for the establishment of Industrial Estates was launched in the Punjab in 1959 under the instructions of the Government of India. The Ludhiana Estates, the first to be started in the State, is one of the biggest and most successful Industrial Estates in the State. It was set up in 1959 with a view to providing suitable accommodation to the expanding industry of Ludhiana as also power, water and transport and such other amenities as common facility centres, collective purchase of raw materials and sale of finished products. The estate is 26.2 acres in area and has 223 sheds for housing small units, categorised into three classes 'A', 'B' and 'C'. The main industries carried on in the Estate are cycle-parts, sewing-machine-parts, agricultural implements, machine-tools, motor-parts, etc.

An important item in the Third-Five-Year Plan (1961—66) was the development of cottage and village industries. It was also envisaged to have a Rural Industrial Estate in each of the Community Development Blocks.[12] . At present, there are two Rural Industrial Estates, one at Utalan in Samrala Block and the other at Ramgarh Sardaran in Dehlon Block. The former has 12 sheds while the latter has 8 sheds.

(e) Sources of Power

Power is the most important factor in the economic development. The sources of power in the district comprise electricity, diesel oil, petrol,crude oil and coal. Wherever possible, electricity is slowly but steadily replacing the other sources of power.

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11. At Ludhiana, the Industrial Area 'B' has been further extended. It is called Industrial Area 'B' Extension.

12. During the Fourth Five-Year Plan (1969-74) the State Government proposes to spend over a crore of rupees on different schemes for the growth of industry in the district besides advancing loans amounting to Rs 80 lakhs. Rs 90 lakhs will be spent on development of industrial focal point of Dhandari Kalan—4 miles from Ludhiana. The amount will be spent on providing light, power, water-supply and construction of roads and link roads. Rupees 3 lakhs will be spent on the development of existing industrial areas 'A' and 'B'. These arrangements will result in planned development of industrial areas in Ludhiana.

A spectacular rise in demand for electricity witnessed in the recent past has hardly any parallels. Its emergence as an item of luxury for a few well-to-do urbanites in the twenties of this century when the man in the street took it to be something to be wondered at and its present demand as an item of necessity both for urban and rural areas, which at one stage looked a far cry, is just like a dream come true. In the pre-Independence period its use was mainly confined to urban areas.

A complete change in the outlook came with Independence when gigantic programmes of execution of multipurpose river valley projects were launched and electricity came to be known as an index of the measure of prosperity in any region. More and more people started discarding the age-old manual process used both in agricultural and industrial production.

Ludhiana was for the first time electrified in 1933. A power sub-station was installed with a capacity of 1500 KVA with three transformers of single phase. This sub-station was fed by Jogindarnagar Power House (now in Himachal Pradesh). This arrangement continued upto October 30, 1953. The capacity of the sub-station was increased to 2500 KVA on October 31, 1953. The sub-station was thus, having three transformers of single phase plus one transformer of three phases combined. In May, 1954, the transformer of three phases combined, of 1000 KVA, was disconnected and replaced by single phase transformer of 1500 KVA. Another transformer with a capacity of 2000 KVA was also installed. The electric current was transmitted to Ludhiana via Jullundur.

The above position lasted upto May, 1955, when Ludhiana switched over to Ganguwal Power House instead of Jogindernagar Power House. The capacity was fixed at 9600 KVA. On August 2, 1956, a transformer of 2000 KVA was removed and the capacity thus reduced to 7600 KVA. Thereafter, two new transformers with a total capacity of 16000 KVA were installed, one on February 26, 1958, and the other on May 22, 1959, and those already existing were dismantled. Another transformer of 8000 KVA was added on April 18, 1962. One more transformer of 16000 KVA was added on December 19, 1963. On February 17, 1964, a transformer of 16000 KVA was replaced by that of 8000 KVA. Thus, from that date, the total capacity of the Ludhiana station was 32000 KVA.

The transformers previously installed on the G. T. Road were shifted to Jamalpur on the Ludhiana-Chandigarh Road during 1967-68. The Jamalpur station is under the Executive Engineer, Punjab State Electricity Board, Ludhiana, who is under the administrative control of the Superintending Engineer, Punjab State Electricity Board, Ludhiana.

The Right Bank Power Plant, 220 KV grid Sub-Station, Jamalpur (8 kms. from Ludhiana on Ludhiana-Chandigarh Road) completed in March, 1969, at the cost of about 2 crores, has further accelerated electrification of the district. The Receiving End of the Sub-station is :—

(1) From right wing power plant 220 KV double circuit line ;

(2) From Kotla Ganguwal Power complex 132 KV double circuit line ;
and the Sending End is :—

(1) 220 KV double circuit line to Sangrur ;

(2) 220 KV double circuit line to Jullundur ;

(3) 132 KV single circuit to Moga ;

(4) 132 KV single circuit to Jullundur ; and

(5) 3 Nos. 33 KV feeders to Ludhiana city and its suburban (including Jagraon, Halwara and Doraha).

The transformer capacities of the Sub-Station are :—

(1) 2 Nos. 220/132 KV. 90 MVA auto transformers ;

(2) 2 Nos. 132/66-33 KV. 40 MVA transformers ; and

(3) 2 Nos. 33/11 KV. 2 MVA transformers (one installed and the other likely to be installed by 1969-70).

The total capacity of the transformers mentioned above at serial No. 2 is 80 MVA, i.e., 80,000 KVA feeding Ludhiana, Jagraon, Halwara and Doraha. The total load of the transformers is, however, 50 MVA, i.e., 50,000 KVA.

Jagraon was electrified for the first time in 1954 when a sub-station of 33 KV grid capacity was installed there. It is sufficient to meet the requirements of the town. This sub-station is fed from Nos. 132/66-33 KV. 40 MVA transformers, Ludhiana.

The Jagraon sub-station is under the Sub-Divisional Officer, Punjab State Electricity Board, Jagraon, who is under the administrative control of the Executive Engineer, Punjab State Electricity Board, Moga.

The 16-mile long 132 KV power Samrala-Gobindgarh transmission line as well as the two power sub-stations of 132 KV capacity at Samrala and Gobindgarh were commissioned on June 15, 1968. The new transmission lines, installed at a cost of Rs 11 lakhs, will ensure considerable improvement in power supply and voltage conditions at Samrala, Khanna and Machhiwara in Ludhiana district ; Gobindgarh, Sirhind, Bassi and Rajpura in Patiala district and surrounding rural areas.

The town of Khanna was electrified for the first time in 1954 from Sub-Station Gobindgarh (district Patiala). From 132 KV grid sub-station Gobindgarh, a 33 KV feeder transmission line, with its transformer capacity of 12.5 MVA 132/33 KV, feeds Khanna Sub-Station. To step it down, a 33/11 Sub-Station with 6 MVA capacity has been installed at Khanna.

(f) **Growth and Development of Industry**

Ludhiana district has now come to occupy a place of pride in the field of small-scale industry. The industries of the district are for the most part centralised at Ludhiana. Some industrial units are coming up in the adjoining towns like Khanna.

The World War II (1939-45), gave a big stimulus to the industrial growth of Ludhiana, and industries like hosiery, manufacture of cycle-parts and sewing machines have made tremendous progress. The partition gave a rude shock to this progress due to the mass migration of the Muslim artisans who comprised the strength of the labour force. This shock was, however, soon absorbed and the post-Independence period has witnessed still greater progress in hosiery, cycle-parts, sewing-machines, weaving (both powerloom and handloom), dyeing and calico printing.

Manufacturing is also done of hosiery machines, machine-tools, motor-parts, oil-engines, oil expellers, chaff-cutting machines and threshing machines. Steel is re-rolled, and some units manufacture surgical instruments, steel pipes, cutlery, fountain-pens, belt fasteners, aerials, electric fans, pipes, band saws, screws and brass wares. Some units assemble radios. Such a wide variety and assortment in industry is hardly to be seen in any other town in India.

Plants for re-rolling iron and other metals exist at Ludhiana and Khanna. Cotton-ginning and pressing, oil-seed crushing, flour milling, *dal* plants, bakeries, ice factories, cold storages, tanning, shoe-making, soap manufacture, sodium silicate preparation, box-making, wood-working and *chick*-making are dispersed in a number of neighbouring towns.

The first half of the year 1965-66 witnessed a significant expansion in the industrial economy of the district. But in the second half there was a sudden set back to the industrial growth owing to the Indo-Pak conflict, acute shortage of electricity which occurred on account of shortage of water in the Bhakra Dam owing to failure of rains and frequent political agitations. During this disturbed period the banks were reluctant to advance credit facilities and the money market remained very tight. The Department of Industries came to the rescue of small-scale units during this difficult period and an Emergency Loan Scheme was announced by the Government to give relief to the war affected units. Under this scheme, an amount of Rs 28,16,220 was advanced to 429 parties in the district. The major industries covered were auto-parts, cycle-parts, machine-tools, hosiery and textiles.

Thus, after a fall of about Rs 3 crores during the crisis ridden year of 1965-66, the industrial production in the district showed signs of recovery during 1966-67 and reached the production level of 1964-65. The industrial production in small, medium and large-scale sectors was over Rs 39 crores during 1966-67 as compared to about Rs 36 crores during 1965-66. The production in the village and cottage industries sector is not accounted for in this estimate. This sector produced goods worth Rs. 1 crore during the year 1966-67.

The present-day industries in the district may be categorised under three broad heads, viz., large-scale industries, small-scale industries and village industries. A few industries which fall partly in the large-scale sector and partly in the small-scale sector have been dealt with as a whole among those in the large -scale. The particulars of the different industries, viz., the number of units engaged, annual production and average employment, during the six years from 1961-62 to 1966-67, are given in the Appendix at pages 289-300.

(g) **Large-Scale Industries**

1. **Woollen Manufactures.**—These may be described under three different heads, viz., wool spinning, woollen textile and woollen hosiery.

(i) **Wool Spinning.**—The worsted, shoddy and indigenous woollen yarns are the most important basic raw materials for woollen textile and hosiery, which are manufactured on a large scale in the district. Prior to 1949, the supplies of yarn had to be obtained altogether from the spinning mills outside the State, which were situated in Calcutta and Bombay, except the one at Kharar. This created practical difficulties for the hosiery manufacturers as the supplies from the spinning mills were irregular, particularly during the season when the stocks invariably ran short and the prices rose to unjustified levels. Quite often it was not possible for the industrialists to get the yarn of requisite count and quality at the appropriate time. This naturally prompted some of the more enterprising and bigger units to instal spinning plants within the city itself.

The first worsted wool spinning mill was established at Ludhiana in 1949. It gave impetus to several others with the result that by 1956 the number rose to six. In 1965-66 nineteen textile mills in the large-scale sector were engaged in the spinning of worsted yarn and manufacturing woollen textiles. The total number of authorised spindles installed with these units was 23,526. Powerlooms numbered 159 and handlooms 316. Their investment in this industry amounted to Rs. 472 lakhs and provided employment to 3,160 workers. The capacity is partially utilised due to limited import of wool tops. Shoddy

and indigenous wools are also now being used as raw materials. The production during 1965-66 was valued at Rs. 424.27 lakhs. Besides these, there exist 14 small-scale unauthorised spinning mills.

These units work throughout the year and are engaged in the production of hosiery yarn, knitting yarn and yarn required for woollen textiles. Previously, the yarn was produced only from wool tops imported from abroad. But, due to the limited supply of wool tops and import restrictions thereon, indigenous wool is also now being used for spinning yarn. Even imported shoddy wool is being used for course woollen textiles and hosiery.

A big Government undertaking on co-operative basis for combing, viz., All-India Wool Combers Co-operative Society, Ltd., has been set up at Dhandari Kalan, a few miles from Ludhiana [13].

(ii) **Woollen Textile.**—Woollen Textile industry was started in the district in 1949. At Ludhiana, 14 big and 6 small units are engaged in the manufacture of woollen textiles, viz., worsted cloth, woollen cloth, tweeds and blankets. The industry has a bright future. Its products are also exported to Hongkong and Afghanistan. Worsted, woollen and shoddy yarn constitute the raw material.

About Rs. 5 crores are believed to have been invested in the industry.

(*iii*) **Woollen Hosiery.**—This item has been dealt with in detail in subsequent pages.

2. **Cycles and Cycle-Parts.**—In the industrial boom which occurred in the wake of independence, manufacture of cycles and cycle-parts is by far the most important of the industries developed in the district. Although the industry has shown phenomenal development in the post-independence period, its beginnings can be traced as far back as 1936, or even earlier, when certain repair shops took up the manufacture of accessories like stands, carriers and

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13. The All India Combers Co-operative Society, Ltd., Dhandari Kalan, was registered on January 31, 1961, mainly to establish a Wool Combing Plant in the co-operative sector. The promoters of the scheme included the spinners, hosiery manufacturers, weavers and workers, etc. As a result of the Chinese aggression in 1962, the State Government decided to contribute to the share capital of the society on matching basis, in order to accelerate the pace of the project, which had assumed great importance as a defence oriented industry. The total membership of the society as on March 31, 1966, was 451, which included most of the big industrialists of Ludhiana and Amritsar, connected with the woollen industry.

The subscribed capital of the society as on March 31, 1966, was Rs 11,98,200 out of which a sum of Rs 9,44,670 was fully paid.

The Society has constructed the administrative block and the factory building and imported a part of the machinery (Noble Combs) from U.K. It has also been granted an import licence for the import of the requisite machinery for the working of the Noble Combs from Japan. The capacity of the Noble Combs is about 1·2 million lbs. wool tops per annum, on two shift basis.

axles as spares. Reduced imports from abroad during the course of the World War II(1939—45) provided an opportunity for the industry to grow both in volume and diversity. The next phase of expansion came in 1957, when the Government of India restricted the imports and fixed assemblage quota of full cycles as between small-scale units and large scale establishments. Manufacture of cycle-parts and assembling of complete cycles is now a leading engineering trade in Ludhiana though some units also exist in other towns of the district, such as Jagraon.

The various items of raw materials and components required by the industry are : Free Cutting Steel, Steel of various types, Steel pipes, M.S. Sheets (10 to 24 gauges) M.S. Strips, M.S. rounds and bars, M.S. wires and seamless tubes, etc. The other ancilliaries are tyres, brake rubber, pedal rubber, oils, component parts like chains, rims, BB. Shells, steel balls, etc., and consumable stores, such as nickle annodes, copper electroplating and mopping materials, coal, paints, etc. Steel balls and rims are imported from other States. With the exception of cold roller sheets and seamless welding tubes, all other varieties of iron and steel are produced in India.

Labour required for the industry, both skilled and unskilled, is available locally. It has been one of the main reasons for the localisation of the industry at Ludhiana. The Ramgarhia community, who are born technicians and possess a mechanical bent of mind, have a natural aptitude for engineering industries. The high margin of profit visualised in this industry tempted them to leave other engineering vocations in order to take up the particular industries. Over the years the workers have become specialised in their particular fields.

The Government Testing and Finishing Centre, Ludhiana, renders cheap services in heat-treatment, electroplating, enamelling and testing to the industry. The Small Industries Service Institute set up by the Government of India at Ludhiana, is also playing an important role in disseminating the use of latest methods of producing various parts, up-to-date machinery, etc.

It is estimated that in 1947 the district had 25 units in the line, producing goods worth about Rs. 10 lakhs. In 1966-67, there were 558 small-scale units manufacturing cycle parts besides 9 small-scale and 2 large-scale units assembling complete bicycles. The industry provided employment to over 6,000 persons both in the large and small-scale sectors. The value of annual production during the year amounted to Rs. 896 lakhs. Cycles and cycle-parts manufacturing units are also having a good demand of their products in the foreign markets, especially from the Middle East countries [14].

14. Goods worth Rs. 15·45 lakhs were exported to foreign countries during 1965-66. A notable feature of the industry during the year was that a Ludhiana firm in the large scale sector gave collaboration to the Ceylon Government for establishing cycle manufacturing units there.

3. Sewing-Machines and Parts.—The manufacture of sewing-machine parts and assembling of sewing-machines is another important industry of the district. Its origin in the Punjab can be traced back to 1925, when a unit took up the manufacture of sewing-machine components at Bassi Pathanan (district Patiala). These components were initially manufactured in the crude manner and on crude and self-improvised machinery, and were mainly supplied to certain repair shops for replacements, etc. The industry greatly developed during the World War II (1939-45) when, on the inevitable stoppage of imports, acute shortage of sewing-machine parts was felt. People had to pay high prices for sewing-machine parts needed for replacement in the imported sewing-machines. The situation induced some people to start manufacture of these parts. The requisite equipment and machine-tools for the manufacture of the parts were not available ; but the enterprising spirit of the people overcame the difficulties. It was not long before the industry was centralized in Ludhiana, which had all the needed skill and favourable circumstances for the development of a small-scale industry of this kind. The industry made good progress because the indigenous parts were much cheaper as compared to the imported ones. The quality of the locally made parts also improved steadily.

On the partition such displaced persons as had their own workshops for the manufacture of sewing-machine parts in Lahore and other places in West Pakistan, resumed this activity in a small way at Ludhiana. In 1953, only eleven spare-parts were allowed to be imported. The industry progressed very much as there was shortage of sewing-machines since World War II. In 1964, Government imposed further restriction on the import of spare-parts.

Nearly Rs. 25 lakhs are invested in 3 factories in the large-scale and Rs. 2 lakhs in 325 factories in the small-scale sectors. At present out of the total of 106 spare-parts required for assembling a sewing-machine, 100 spare-parts are manufactured locally and the rest are imported from other districts/States. In 1966-67, there were 4 large-scale and 18 small-scale assembling units, and 1 large-scale and 194 small-scale units manufacturing sewing-machine parts. The total production during the year was 63,723 machines valued at Rs. 81 lakhs. The exports during the same year valued at Rs. 6 lakhs.

The principal raw materials required for the manufacture of sewing-machines and parts are steels of various kinds, castings, oil and nickle and chrome salt, nickle, annodes, peerless polish, coal, etc.

4. Steel Re-rolling.—This industry was started in the district about the year 1940 when two concerns were established. In 1956, there were 3 re-rolling

mills—two at Ludhiana and one at Khanna. In the large-scale sector, one unit went into production during 1965-66 and produced goods worth Rs. 13.84 lakhs. In the small-scale sector, the number of units increased from 3 in 1964-65 to 12 in 1965-66 with production valued at Rs. 3.79 lakhs.

In 1966-67 there were 12 units in Ludhiana, 3 in large-scale and 9 in small-scale sector and 1 in large-scale sector in Khanna and 2 in small-scale sector. About Rs. 25 lakhs were invested in the industry. The annual outturn was worth about Rs. 10 lakhs.

Round, square and flat bars, hoops and strip angles are manufactured. These products are used in cycle, automobile and building industries.

The raw material includes scrap iron and billets and steam coal.

5. **Machine-Tools.**—Till 1947, Ludhiana could hardly boast of any well-developed small-machine tool industry. In 1947, there was one such unit in Ludhiana with a complement of 30 workers and an estimated production of Rs. 0.5 lakhs. The number of units rose to 9 in 1951, 39 in 1955, 44 in 1956 and 255 small-scale and 3 large-scale in 1966-67. The estimated production in 1966-67 was valued at Rs. 291 lakhs, providing employment to 3,809 workers. Goods worth Rs. 3 lakhs were exported. During the following two decades, the concentration of various industries and the availability of skilled labour have made the city a centre for the manufacture of various machine-tools like lathes, drilling-machines, milling-machines, planners, shapers, presses, drills, grinders, hacksaw, power-presses, slotting-machines, circular saws, wood-working lathes, band sawing-machines, small tools with accessories for different machine tools, etc. The raw materials used are iron, steel and hard coke.

6. **Automobile Parts.**—The automobile (chassis and suspension) industry is also gaining importance in the district. Its origin can be traced to the World War II (1939-45) when nuts and bolts began to be manufactured locally. As time passed, the number of items manufactured increased. The real start of the industry was made after the partition when some local Ramgarhias took it up as comparatively more profitable of the engineering industries.

About Rs. 1.25 crores are invested in the industry; 150 registered units and 100 unregistered units are in the field and all are located at Ludhiana. Out of these, one unit is in the large-scale sector.

The major items manufactured in respect of chassis and suspension comprise : hub bolts, U bolts, centre bolts, spring leaves, hangar shackle, engine pullies, hubs and hub-drums, king pins and spring pins. The industry has

shown rapid development. In 1956, there were 30 units engaged in it at Ludhiana. In 1965-66, there was 1 large-scale unit and 148 small-scale units, providing employment to 1,826 workers. The production during the year was of the value of Rs. 19.08 lakhs and Rs. 112 lakhs in the large and small-scale sectors, respectively.

The main raw materials are iron and steel, pig iron, gun metal, constructional alloy steel, etc.

7. **Diesel-Oil Engine and Parts.**—The origin of the industry in the district can be traced to impetus of World War II when in 1941-42 Ludhiana entered the field. To begin with, small spare-parts needed for the repair of diesel engines were manufactured. The manufacture of major spare-parts was also started from 1945-46. Complete diesel engines came to be manufactured from 1948 onwards. In 1966-67 there were 10 units with annual production of Rs. 17 lakhs.

8. **Scooters.**—One unit is engaged in the production of scooters at Ludhiana since 1962. It is working in collaboration with a Japanese motor company in respect of technical know-how. About Rs. 8 lakhs have been invested in the industry. In the beginning, the yearly out-turn was 1,500 scooters. But, due to certain technical difficulties, the production was reduced to 800 to 1,000 in 1965. In 1967-68, however, the production was raised to 7,500 scooters.

9. **Hosiery Needles.**—The industry was started for the first time in the country in 1960 when a unit was established at Ludhiana with Japanese technical know-how. From 1962-63, an automatic plant has been installed. About twenty types of needles, used in knitting machines, are manufactured. The industry faces competition from Chandigarh. Its annual production in 1966-67 was of the value of Rs. 2.10 lakhs.

The raw materials comprise high carbon strips and wire, both of which are imported from Japan.

10. **Card Clothing** [15].—There is only one unit at Ludhiana engaged in card clothing since 1960, with a capital investment of about Rs. 10 lakhs. Its yearly out-turn is about Rs. 20 lakhs. Card clothing is a key industry for all textile mills. It provides employment to some 45 persons.

The raw materials for the card clothing are foundation cloth, steel wire and end clips and plates (imported from Japan and Belgium).

[15]. It is a type of steel wire brush spread on 2" wide foundation cloth. This is used in cylinder, doffer and tops used in cotton and woollen textiles. This is used for carding in Cotton and Woollen Textile Mills. The special type of brush is fitted in a cylinder in the doffer and tops machines. It functions as a spiral and splits the material into fine fibres as a result of rotation.

Stepping fillets—a kind of hard brush for cleaning card clothing—are also manufactured.

11. **Nylon and Staple Spinning.**—Only one unit is engaged in the production of nylon in the district at Ludhiana. It started production in April, 1964.

The yearly output is worth about Rs. 7 lakhs.

12. **Gas (Oxygen).**—The production of oxygen gas, used for welding purposes as well as in hospitals, started in the district towards the end of the year 1963, when the first factory was establsihed at Ludhiana. The gas was thus made available at the place at comparatively cheaper rates. Another concern also came up by the end of 1964. Rs. 18 lakhs have been invested in the industry. Previously the Ludhiana industry had to face difficulty in getting the materials from Delhi.

The total capacity of both the units is 163 cubic metres per hour. The annual production in 1966-67 was worth Rs. 9.30 lakhs.

13. **Measuring Tapes.**—The industry was started at Ludhiana in 1950 by the only concern which has since greatly expanded and is the single largest tape producing unit in Asia. The technical know-how is indigenous. The installed machinery valued at Rs. 10 lakhs is both imported and improvised. Local made machines and parts have also been adapted for the purpose. Earlier only metallic woven measuring tapes were produced, but now glass fibre tapes, steel tapes and steel rules are also manufactured. There has been a remarkable improvement in the get-up of the tape in regard to shape and final finish. Besides there are 4 units in the small-scale sector. The annual production of industry in 1966-67 was worth Rs. 23 Lakhs.

The industry meets the entire home demand, which was previously met through imports. The tapes are also exported to Middle East, South-East Asian countries and U.K., etc. The industry is thus a great foreign exchange earner.

14. **Flour Mills.**—There are 2 roller flour mills at Ludhiana in the large-scale sector. These produce flour, *maida*, *suji*, *dal*, *chokar*, *etc*. One of these was started in 1931 and the other in 1937. The mills have a total capacity of grinding 6,400 tons of wheat per month, but, due to shortage of foodgrains, these are required to grind only imported wheat.

15. **Hosiery.**—Ludhiana has been accepted as the home of hosiery industry, which has been established there for over a century. Ludhiana knitters control almost all markets within the country and cater for about 90 per cent of the total demand. They have also entered the overseas market to

which the hosiery products have started flowing for the last about a decade and a half in ever increasing volume. Within the country, the industry meets the needs of both the civil population and the requirements of the Defence, Police and other Government Departments. Ludhiana hosiery products are very popular in several foreign countries like Ceylon, Burma, Africa, Thailand, the Middle East and the Far East.

The industry traces its origin to the thirties of the 19th century when, as a result of a severe famine in Kashmir, several Kashmiri families left their homes in distress and settled down in Ludhiana and its environs. With their traditional skill and artistic talent they soon made the town a centre of knitting socks on wooden or steel rods. Thus they laid the foundation of a craft, which initially formed a useful spare-time job for the ladies only, but in course of time developed into an important industry through the agency of the local traders who commercialised the artifact of the womenfolk. They usually knitted topless socks. After some years the knitting of complete socks was introduced here mainly through the enterprise of a Jullundur girl, who was married to a businessman at Ludhiana. The girl had learnt the art from the wives of Gorkha military officials stationed at Jullundur. Thereafter, the socks and banians of a finer quality began to be knitted here.

It was near about 1894 that this primitive organisation of hosiery knitting by the women folk was given up and machine knitting was introduced at Ludhiana. This gave the local industry a revolutionary turn. The success of the first hosiery machine installed at Ludhiana in that year led to a number of firms installing these machines.

During the World War-I (1914—18), like many other industries, the hosiery industry also received its share of war boom, and the manufacturers, who had till then confined their attention to foot-wear alone, extended their activities to produce woollen sweaters and pullovers. Soon Ludhiana developed a brisk trade in this type of goods. Thus, it emerged as the home of Indian hosiery and was poised for a big leap forward. The introduction of Raschel loom from Germany brought about a radical change in the technique of production. It facilitated cheaper production on a mass scale.

During the depression following the World War-I (1914-18) the industry passed through a period of crisis as the prices of hosiery goods fell by 25 to 30 per cent due to competition from Japan. The local hosiery manufacturers boldly faced this crisis by reducing the margin of profit and increasing their efficiency. The then Government of India also afforded adequate protection to hosiery industry through the Tariff Amendment Act of 1934, against Japanese dumping, which was further amended in 1936 to cover all branches of the hosiery industry.

The stoppage of imports chiefly from Japan and the tremendous demand for hosiery goods by the Defence Department during the World War-II (1939-45), helped the industry towards unprecedented expansion. But, the shortage of yarns and the scarcity of hosiery machine needles, for which the industry was dependent upon foreign supplies, did not allow the manufacturers to take full advantage of the position. To overcome this difficulty, the yarns and needles were supplied by the purchasing agency of the defence equipment. In spite of all these favourable circumstances the condition of the industry during the period was not satisfactory.

In spite of some major set-backs during the last 20 years—partition of the country, shortage of foreign exchange, Chinese aggression, Indo-Pak conflict, credit squeeze, re-organisation of Punjab, political agitations and the severe recession through which all the industries are presently passing—the woollen hosiery industry of Ludhiana has made remarkable progress. With the small hand—driven machines installed in the dark corners of small houses in the obscure little lanes of Ludhiana, the industry has been turning out production worth crores of rupees and catering to the entire needs of the country, both for civil and defence requirements. In 1966-67, there were 2,000 units in the industry with a total annual installed capacity of about Rs. 25 crores and an actual production of Rs. 12 crores, almost equally divided under three broad sections, viz., (i) Home Market, (ii) Defence requirements, and (iii) Exports. All the 2,000 units in the industry are not well-equipped, not more than about 50 per cent, i.e., 1,000 units, could be termed as effective.

The potentiality of the industry as a big foreign exchange earner has been realised in recent years. A beginning in the export field was made about 15 years back when some enterprising industrialists of Ludhiana visited foreign countries to explore markets for woollen hosiery. Despite tough competition, both in quality and price, from advanced countries, the industrialists succeeded in procuring orders in small lots, more or less as 'trial orders'. Till five years back the export of goods had grown around Rs. 50 Lakhs per annum. The big leap in exports was accomplished four years ago when the East European countries felt interested in Indian woollen hosiery. Although still working with out-moded machines, this small-scale industry has now started exporting woollen hosiery in large quantities. The exports in 1966 were worth 4.55 crores of rupees and during 1967 these touched Rs. 4 crores. During the last three years, the major buyers were East European markets. Goods worth about Rs. 50 Lakhs were also sold in the general currency areas, principally in the Middle East countries. During the current years, the industry has orders in hand worth Rs. 5 crores, of which about Rs. 3 crores are from East European Markets, and the remainder from the Middle East and African countries. With successful fulfilment of the orders in hand, the industry expects to procure contracts for an

additional value of at least Rs. one crore, which will make it possible for the industry to achieve a target of exports worth Rs. 6 crores in 1968. The war in the Middle East last year has assisted the industry in exploring new avenues for its products, wherefrom the orders have increased to about Rs. 2 crores in the year as against about Rs. 50 Lakhs two years back. The main markets for the products of the industry are U.S.S.R., Czechoslovakia, Poland, Hungary, Bahrein, Burma, Kenya, Kuwait, Aden, Sudan, Libya, Hongkong, Zambia, Tanzania, etc. The industry expects to touch the annual exports of atleast Rs. 8 crores in the next three years.

16. **Powerlooms.**—Started a few years before the World War II, the powerloom industry made great strides in the post-Independence period. It switched on to the production of staple fabrics as mill made cotton yarn became un-available. The main raw materials for the industry, viz., staple yarn, art-silk, cotton-yarn of medium counts and woollen yarn, are produced mostly in other States. Some finer varieties are imported from abroad.

Mostly the powerlooms are of indigenous make. The industry includes both self-sale units and fabricators. Their number, which was only 50 in 1947, rose to 165 in 1954-55 and to 570 in 1966-67. The total investment in the industry was estimated at Rs. 75 lakhs in 1947 and Rs. 365 lakhs in 1961.

The total value of the production was estimated at Rs. 92 lakhs in 1947 and Rs. 430 lakhs in 1961. It rose to Rs. 722.60 lakhs in 1964-65, but fell to Rs. 497 lakhs in 1966-67.

Most of the powerlooms are working on staple and art silk yarn. The main products are *tehmats*, linen and other varieties of staple fabrics, ninon and *shantoon*, woollen shawls and corduroy.

(h) Small Scale Industries

The small scale industries sector has progressively acquired a prominent place in the development activities of the country. Consequent upon the revision of the definition of the small-scale industry[16], the size and scope of the small

16. In 1960 the Ministry of Industry, Government of India, had defined small scale industries as industrial units with a capital investment of not more than Rs. 5 lakhs. Capital investment for the purpose of the definition meant investment in fixed assets like land, buildings, machinery and equipment.

In view of the changed conditions and, in accordance with the recommendations of the Small Scale Industries Board, the Ministry of Industry, Government of India, has further amended the definition of small scale industries as :—

"Small Scale Industries will include all industrial units with a capital investment of not more than Rs. 7·50 lakhs irrespective of the number of persons employed. Capital investment for this purpose will mean investment in plant and machinery only."

In calculating the value of plant and machinery, the original price paid by the owner, irrespective of whether the plant and machinery, are new or second-hand, will be taken into account.

scale industries sector has been considerably widened, thus enabling a large number of industrial units to avail themselves of increased assistance and facilities.

The socio-economic significance of the role of small-scale industries in relation to the economic development of the country has been more fully realised in the post-independence period. It is reflected in the two Industrial Policy Resolutions of the Government of India adopted in 1948 and 1956 as well as in the progressive allocations made for the development of this vital sector in the Five-Year Plans.

The total number of small scale units in Ludhiana district during 1965-66 was about 4,200 which rose to over 4,300 during 1966-67. The total production, which was worth about Rs. 26 crores during 1965-66, also rose to Rs. 27,50 crores during 1966-67. The increase in the new units during 1966-67 was the largest in the woollen hosiery ; which rose from 1,887 in 1965-66 to 2,000 in 1966-67. The machine tool industry witnessed an increase of 11 units from 244 in 1965-66 to 255 in 1966-67. In the field of production the maximum increase was shown by the hosiery and machine tools sectors. The woollen hosiery production rose from Rs. 7 crores in 1965-66 to Rs. 8 crores in 1966-67 while the machine tools production registered an increase of Rs. 60 lakhs bringing total production to Rs. 2.5 crores.

17. **Agricultural Implements.**—The incentives given by the Government for the development of agriculture in general and the selection of Ludhiana district for intensive agricultural programme in particular has given good stimulus to the manufacture of agricultural implements at Ludhiana. The industry has also shown good progress. In 1956 there were 15 units —4 at Ludhiana and 11 at Samrala, engaged in the manufacture of agricultural implements. The production during the year was valued at Rs. 1.34 lakhs. In 1966-67, the number of units increased to 68 and produced goods worth Rs. 23.6 lakhs.

18. **Dyeing.**—The dyeing industry made a start almost simultaneously with the setting up of the textile industry at Ludhiana. It caters to the needs of hosiery, power-loom and handloom industries.

Previously, dyeing of wool in the district was done on a very small scale. The investment of the different units was meagre and they were hardly in a position to instal modern equipment. This position continued up to 1954-55 when there were 46 such units. In course of time, in addition to these hundreds of small units, eight bigger units came into existence in 1966-67. With the installation of modern equipment, the output has considerably improved in quantity and quality.

The units are split into the following three sectors :—

(i) units engaged in staple dyeing ;

(ii) units engaged in wool dyeing ; and

(iii) units engaged in wool dyeing for military contractors.

The raw materials for this industry are dyes—English and Indian, acids, bleaching powder, soda ash and wood. Except for wood and acids, all the items are obtained from other states.

These units more or less work on fabrication basis and dye yarn of others. There are different grades of dyeing; fast to soap, fast to *bhatti*, etc. Staple yarn dyeing is mostly indirect, i. e., *kachha* or fast soap. Wool dyeing for military contractors is fast to *bhatti*, whereas for civil consumption it is *kachha* or pucca. Staple dyeing is done mostly for handloom units.

19. **Washing and Finishing**.—Washing and finishing is ancilliary to textile industry. On the setting up of textile units at Ludhiana, this industry has developed simultaneously.

In 1956, there were 16 units located at Ludhiana, out of which two were registered under the Indian Factories Act. The number of units rose to 3 big and 20 small in 1965-66.

The machines used by these units comprise hydro-extractor for squeezing, dry-cleaning plant, tables, brass-press, wooden or stainless vats for bleaching tubs, etc.

The raw materials required for the three different processes of the industry are :

Wet washing : Soap, Soda and sulphuric acid.

Bleaching : Sodium hydro sulphite or potassium permanganate and sodium bisulphite.

Dry Cleaning : Petrol and turpentine oil (for woollen cloth).

Ludhiana badly needs a dyeing and finishing plant for hosiery industry. A plant will be installed at a cost of Rs. 50 lakhs. The State Government will purchase shares of Rs. 10 lakhs and the remaining will be owned by the private sector. It would increase the export potential of hosiery goods.

20. **Calico Printing**.—The industry developed in Ludhiana alongside the development of textile industry. Mill made designed and printed cloth, however, caused a set back to calico printing. Although it is on the decline,

yet some of the units are catering to the varied needs of the public. The industry is perennial but its peak season is summer months. In 1956, there were 12 units functioning in urban areas of the district. The number of units rose to 32 in 1965-66.

The tools consist of wooden blocks and *addas*, like tables with small legs and a stove. These are available locally except wooden blocks which are sometimes got prepared from other places.

The raw materials used are dyes, gum, acids, caustic soda and fuel, all of which are available locally.

The industry generally works on fabrication basis for printing *chaddars kheses*, etc., for the general public. The charges depend on the number of colours used.

The calico printing done at Ludhiana is popular with the public in general and sometimes people prefer to get some of their requirements printed instead of purchasing mill-made printed goods.

21. **Nuts and Bolts.**—The products of this industry comprise two main types as under :

(i) **Nuts and Bolts (hardware).**—This industry was started in 1958. One big and two small units are engaged in the manufacture of nuts and bolts, panel pins, tinmen, rivets, nails, special type of screws and bolts, etc. This industry is auxiliary to Government projects and other industries. Besides, 100 units were in small scale sector, engaged in the manufacture of miscellaneous types of nuts and bolts, in 1966-67.

(ii) **Nuts and Bolts** (*patta kabal*).—These comprise three main types, viz., oval plate belt, original potent plate and button plate, which are further sub-divided into several types.

The industry originated during the World War I (1914-18). Taking advantage of the heavy reduction in imports and the prevailing high prices for these articles, a number of small units sprang up in and around Ludhiana. The product turned out by these factories was of somewhat crude type, yet it could find market because of acute scarcity of this essential component of industrial machinery.

The industry entered a new phase after the partition in 1947 when it began to expand on a big scale.

In the district, there are 16 units engaged in the manufacturing of *patta-kabla*. Out of these one is in the large-scale category. About Rs. 4 lakhs are invested in the industry. The annual out-turn is Rs. 4 lakhs. The products

of large-scale unit are certified to be of the standard prescribed by the National Physical Laboratory, Delhi.

The raw materials used are iron, steel and stainless steel, indigenous as well as imported.

22. **Electrical Goods.**—The industry was started in 1955 on a small-scale. Initially only starters for electric motors were manufactured. In course of time, iron clad switches, of different ranges up to 200 AMPS 500 Volts, began to be manufactured.

Rs. 10 lakhs have been invested in the industry. 40 units were engaged in 1966-67 in the manufacture of electrical goods worth Rs. 20·05 lakhs.

At present, the industry is on small scale. But, with the increasing electrification of rural areas and the installation of tubewells, it has a fairly bright chance of entering into the large scale phase.

23. **Cotton Ginning and Oilseed Crushing.**—Khanna was a well known cotton *mandi* in the beginning of the present century. Gradually the people of the area switched over to sowing of groundnut. Before the installation of oil/ginning mills in Khanna, cotton and groundnut were exported to other areas. The export entailed a lot of trouble due to unwieldy volume/bulk of the cotton/groundnut. The first ginning and oil mill was established at Khanna in 1905. It had daily oil capacity of 9 tons and 7,632 bales of ginned cotton. During the World War II (1939-45) two more oil mills were started in 1939 and 1941. Since 1958 six oil/ginning mills were opened. Thus by 1967 there were 9 oil mills, out of which 4 were also engaged in cotton ginning. Rs. 78 lakhs were invested in the industry with the annual out-turn extraction of 3,38,886 quintals of oil and 52,632 ginned cotton bales with daily capacity of 220 tons and 240 bales, respectively. There are also two cotton ginning mills of sizable capacity at Jagraon.

Amongst these mills one is a solvent oil mill at Khanna. It also manufactures cattle feed, fertilizers and poultry feed from by-products, viz., deoiled cake. This unit also manufactures vegetable oil biscuits. The Mill also produced soap from certain by-products. This unit further extracts oil from rice bran.

In the district oilseed-crushing, flour-milling, *dal*-milling and cotton-ginning is a composite industry. There were 12 units of cotton-ginning and 28 units engaged in oilseeds crushing. The annual production was 60,000 bales in 1968. Besides groundnut, the oilseed industry crushes mustard, cotton seeds, linseed (*alsi*), etc. The groundnut-crushing is confined to Khanna. Its by-products are oil-cakes, etc.

24. **Surgical Instruments.**—The manufacture of surgical instruments at Ludhiana is, like many other industries, a product of the partition of 1947. The only unit engaged in the manufacture of surgical instruments at the place was originally shifted from Sialkot where surgical instruments were manufactured by the well-known ironsmiths of Kotli Loharan, who were the famous manufacturers of the guns and arms under the Lahore Darbar. The industry was rehabilitated at Ludhiana through the enterprise of the dealer, who migrated from West Pakistan. He was fortunate to find a handful of refugee workers from Sialkot and readily engaged them in this industry.

The Unit was first established in 1949. Till 1966-67 there were 2 units, one on very small scale with annual production worth about Rs. 2·5 lakhs. The industry, however, does not admit of rapid scope of expansion.

Different kinds of surgical instruments used in government as well as private hospitals are manufactured. These include ophthalmic instruments, special purpose needles and canulae, electric-medical appliances, table-lamps (anglepoise type), etc. Eye-operating instruments are a speciality of one unit throughout the country. That concern has been approved by the All India Institute of Medical Sciences. The industry is a useful foreign exchange earner and saver.

The main raw materials required by the industry are mild steel, carbon steel, stainless steel, brass, etc.

25. **Plastic Goods.**—The industry developed in the district along with the cycle industry as it meets the requirements of some plastic cycle parts. Out of the two units engaged in it the first was established in 1952. The industry manufactures cycle-handle grips reflectors polythene tubular film, plastic bags and plastic cane etc. In 1966-67 there were 15 units with annual production of Rs. 9.75 lakhs.

26. **Paints and Varnishes.**—The only concern in the district for manufacturing paints and varnishes is located at Ludhiana. Started on a very small-scale in 1955, it has made marked progress and has taken up the preparation of synthetic enamels, stoving enamels, black Japan, stoving varnishes, stiff paints and primus. About Rs. 2 lakhs have been invested in the industry with annual production of Rs. 3.15 lakhs in 1966-67.

27. **Umbrella Ribs.**—First started at Ludhiana in 1957 on a small scale, the industry became well-established by 1961. High carbon steel wire is used in the manufacture of umbrella ribs. Nearly Rs. 3 lakhs have been invested in the industry. In 1966-67 annual out-turn was Rs. 3.15 lakhs.

28. **Radio Assembling.**—This industry sprang up in the district after Independence in 1947 when three units started assembling radio-sets. On

an average all of them assembled nearly 500 sets in a year. The number of units gradually rose to ten. In 1966-67 the number of units assembling radios and transistors[17] was 44. These produced 4,500 sets worth Rs. 6 lakhs. Of these about 10 units were of good standing.

29. **Rubber Goods.**—Started in 1956, this industry manufactures saddle tops, rubber-paddle rods, rubber solution (rough), V-shaped *chappals*, motor spare-parts (rubber), etc. It is sustained by cycle and motor industry. Rs. 1.50 lakhs have been invested in the industry. In 1966-67 there were 9 units with annual production worth Rs. 3.45 lakhs.

30. **Stationery Articles.**—The main articles manufactured in the district include pencils, pins and table stationery as detailed below:

(i) **Pencils.**—Only one unit is engaged in the district at Ludhiana since 1949. Started on a small scale to begin with, it developed in course of time and by 1960 automatic machines were installed.

All types of pencils, viz., writing, drawing, checking, artist, copying and even cosmetic, are manufactured at Ludhiana. For the manufacture of superior types of pencils, cedar wood is imported from U. S. A. Stamping foil is also imported. Due to import restrictions, major portion of the product, consisting of cheap pencils, is manufactured out of indigenous wood from Assam. Lead, the other main constituent, is obtained from Ahmadabad (Gujarat).

(ii) **Pins.**—The industry was started in 1961. There are two pin manufacturing concerns in Ludhiana. Pins, gem-clips (triangular) over-clips and stapple (used in stappling machines) are manufactured. The total production per year is worth Rs. 1.50 lakhs. Mild steel wire constitutes its main raw material.

(iii) **Table Stationery.**—The only unit engaged in the industry in the district at Ludhiana was started in 1959. It manufactures office punching machines—small and heavy, stamping machines, stamp-stands, blotters, table-files, paper-trays, waste-paper baskets, pen-trays, letter-racks, call bells, commercial office file clips, etc.

31. **Snap Buttons.**—The industry was started in Ludhiana at 1959 when only one unit had gone into production. Afterwards two more units came up, of which only one could survive. Manufacture of both parts of snap-button, viz., male and female, as also their tin-plating, is done locally. Rs. 1 lakh have been invested in the industry. In 1966-67 the annual production was worth Rs. 4.75 lakhs.

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[17] Only four parts of the radios and eleven of the transistors are said to be imported while the rest are manufactured in the country.

The raw materials used are brass strips and phosphor-bronze wire.

32. **Spray Pumps.**—There is only one unit in the district at Ludhiana engaged in this industry. Established in 1959, it has the capacity of manufacturing goods worth about fifteen lakh rupees which can fully meet the requirements of the State as a whole. It manufacturers spray dusting machines——both power and hand-operated, used for anti- malarial operations and civil defence purposes.

33. **Steel Furniture.**—In 1966-67, three units were engaged in the manufacture of steel furniture and produced goods worth Rs. 6.10 lakhs during the year. The main items produced are steel almirahs, sofa-cum-bed, sofa fix-tubulars, cash-boxes, safes and a few items of office furniture.

34. **Washing Soap.**—Soap making is an old indigenous industry of the district. The principal centre is Ludhiana, others being Khanna, Raikot and Jagraon.

The important raw materials needed by the industry are caustic soda, oils, soapstone or sodium silicate.

In 1966-67, 94 units were engaged in this industry, with production amounting to Rs. 29 lakhs.

35. **Zip Fasteners.**—The only unit of its kind in the country engaged in the manufacture of invisible zip fasteners is located at Ludhiana. [18] It was started in 1963 with the American machinery and technical know-how. The articles manufactured are invisible-zip fasteners, belt adjusters, side pant-zips and standard-zip fasteners. Its production in 1966-67 was of the value of Rs. 2.05 lakhs.

36. **Chemicals.**—There is no chemical industry as such in the district. However, an agency of the D.C.M. (Delhi Cloth & General Mills) at Ludhiana deals in soda caustic, bleaching powder, all kinds of acids, etc. After packing the goods in sizeable packs, this firm supplies them to retailers and consumers.

37. **Casting/Forging.**—Casting industry was started at Ludhiana about the year 1922 when two or three small units, having small crucible furnaces, one of them having small cupola furnace, were set up. During the early stages, the industry was confined to casting of hosiery machine parts and oil-engine small parts for repair purposes. The above strength of casting units continued for some two decades whereafter the industry began to expand and by the time of the partition of 1947 the number of units had gone up to about 15.

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[18]. The only unit of its kind in India, his is the second in Asia, the first being in Japan which started production in 1960.

At the time, *toka* (fodder cutter) and oil engine main parts also began to be manufactured. After the partition, the number of units increased in 1966-67 to 140 with annual production of Rs. 39.25 lakhs and the industry concentrated itself at Ludhiana.

The industry produces oil engines, machine tools, sewing-machines, hosiery-machines, re-rolling mills, centrifugal pumps and other miscellaneous agricultural implements which have been discussed under respective heads. The forging industry has also been discussed under the heading nuts and bolts.

38. **Oil Expellers and Parts.**—The post-partition period also saw the brewing of another industry, viz., the manufacture of oil expellers and their parts. In 1954-55, the number of units was 8, besides one composite unit which had also undertaken the manufacture of spare- parts, employing 77 workers in all.

39. **Hosiery Machines.**—As an important ancilliary to the well-developed industry, the credit for starting the manufacture of hosiery machines goes to a Ludhiana (Nandpur) firm which launched the enterprise in 1921. It started with the manufacture of simple circular socks-machines. Shortly afterwards, about 6 to 7 units entered the field and round and *dialdar* machines also began to be manufactured. About the year 1938-39, was started the manufacture of Raschal machines which revolutionised the industry. By 1950-51, flat interlock and sinker machines also began to be manufactured. Flat machine was sub-standard in the beginning; but attained perfection about the year 1958-59. Now all types of machines used in the industry are manufactured in the district. With the exception of one unit working in Nandpur, the industry is, however, concentrated in Ludhiana proper. The district can boast of a well-developed hosiery manufacturing industry with several concerns manufacturing quite elaborate structures with reputable precision. Major portion of the demand for machines is being met locally.

There were 20 units engaged in the hosiery machine manufacturing industry in 1954-55. In 1956, the number rose to 28 which continued as such till 1965-66.

Lathes of different sizes, drilling machines, milling machines, shapers and grinders are some of the machines used by this industry.

Iron and steel are the chief raw material of the industry. The machines manufactured are: "Check Petti, Jay Jacquard Machine, Circular Non-Sinker Body Machine, Sinker Body Machine, Interlock, Raschal Machine 96" wide, Cold Calendering Machine, Steam Calendering Machine, Battle Bobbin Winder, Circular Hand Knitting, Circular Plain Rib, Circular Half Jacquard, automatic sock machines, flats and over-look, etc.

40. **Textile Machinery (Spare-parts).**—There is only one unit in the district at Ludhiana engaged in the manufacture of textile machinery spare parts in the district, such as reel and pin, winders, reeling machine, powerloom spare parts, and steam and cold calender[19].

41. **Conduit Pipes.**—This industry was started in the district as late as 1959. In 1966-67, there were 6 units engaged in the manufacture of conduit pipes and produced goods worth Rs. 5.22 lakhs and provided employment to 55 workers. The number of units decreased in the said year due to inter-State competition.

(i) Village Industries

A village industry means any industry which forms the normal occupation, whether whole-time or part-time, of any class of the rural population. According to the Planning Commission, village industries are those small industries which are, in the main, an integral part of the village economy. The small-scale industries located in village areas, thus, come under the village industries category. The employment provided by the village industries is mainly seasonal, and the seasons vary from industry to industry as well as from area to area.

The first effort in the direction of developing village industries and of reviving the old industries started with the *Swadeshi* movement launched by Mahatma Gandhi.

42. **Handloom Weaving.**—It is an age-old industry carried on by hereditary weavers. The period prior to and following the World War II helped the industry to regain some importance because of the shortage of cloth. Though of late textile mills and powerlooms have dealt a stunning blow to the handloom industry, it is receiving due protection from the State. Some varieties of cloth have been earmarked for manufacture only by the handloom. Weavers are helped to convert throw shuttle looms into fly-shuttle looms. A cess has been imposed on mill-made cloth, the proceeds of which are utilized towards rebate to customers.

The main raw materials are hand and mill spun yarn, staple and woollen yarn. Hand spun yarn is available in plenty from village folk in the district. All other varieties of yarn, excepting worsted woollen yarn to some extent, are secured from other States.

Handloom weaving is carried on in all towns of the district. In villages it continues as an important industry. The goods produced by handloom are *khadi*, woollen mufflers, shawls, tie—cloth, *khes* and staple cloth.

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19. The manufacture of power looms is restricted under the orders of the Textile Commissioner, Government of India.

43. **Leather and Hides Tanning.**—Hides, skins and bark of *kikkar* tree form the main raw materials for the industry.

The industry mainly depends upon the death rate of cattle. The hides and skins of dead animals are first flayed and then treated with *kikkar* bark which forms the locally available tanning material.

The hereditary Chamars (tanners), who are mostly engaged in this occupation, lack up-to-date technical know-how and hence do not use modern type of equipment. They remove the leather with crude knives and spoil it. The tanners, too, are not acquainted with modern technique of tanning and thereby reduce the value of leather. Tanning is, however, practised by few only, the general practice is to sell away hides.

In 1966-67, 450 units were engaged in this industry which produced goods worth Rs. 35.75 lakhs.

The cottage units, engaged in the industry, have been mostly organised into co-operative societies. Some of these co-operative societies are working as production-*cum*-sales organisations. These model tanneries have been set up with the assistance from the Khadi Board.

Jagraon is the main urban centre for the industry in the district. The cottage units there have been organised into co-operative societies.

The leather produced by these cottage establishments is mostly used as sole leather or for making country (*desi*) shoes

44. **Shoes and Leather Goods Manufacture.**—Shoe making is also an ancient industry among the traditional shoe-makers. Based on style, leather foot wear is commonly classified into western type and *desi* type. These types of footwear are manufactured of all leather, upper leather and sole of other material, etc., in the district. The raw material for western type of shoes and chrome used as upper, mostly in the manufacture of *desi* type, are imported from other States.

1135 units were engaged in this industry in 1966-67 with yearly out-turn of Rs. 9.30 lakhs.

45. *Kohlu* **(Village Oil Presses).**—With the introduction of power driven oil-crushers, the use of *kohlus* has greatly decreased. Now, there exist only a few *kohlus* in rural areas. 10 units were engaged in 1966-67 in the industry with annual out-turn of Rs. 1.15 lakhs.

46. ***Ban*** **and Rope Making.**—It is the industry of the villages in bet area, lying near the bank of the river Satluj, where *bhabar* grass—the basic raw material for the industry—is available in appreciable quantities. Besides *bhabar*

grass, the locally produced *moonj* is also used for *ban* making. Improved types of machines, hand-driven and power-fitted, are now used for *ban* making. These are provided by Government besides loans for purchase of raw material, etc., in the form of loan and subsidy, etc. There were 70 units engaged in *ban* and rope making in 1966-67 with annual production of Rs. 105 lakhs.

47. **Gur and Khandsari.**—The indigenous production of sugar consisted of *gur* and *khandsari*. Machhiwara was famous in olden days for the manufacture of *khandsari*[20] by means of *khanchi* system, whereby the raw material, *rab*, was allowed to settle for a number of days in *kachcha* tanks lined with green fibrous material (cellulose) found in the *nalas*; and the upper layer of the sediments was separated after the drainage of the residual (*seera*) through a hole at the bottom of the tank. The sediment thus collected was strongly rubbed by feet- pressing and white *khandsari*, stated to be most useful from health point of view, was available for marketing.

With the partition of the country in 1947, the Muslim artisans shifted to Pakistan, and the sugarcane crop having failed for a number of years afterwards, the *khandsari* industry could not be revived on previous scale for lack of skill and shortage of sugarcane.

In the absence of any sugar mill in the district, there is not much allurement to the cultivators to grow sugarcane. They produce *gur*, etc., on small scale, mostly for their personal use. The surplus is sold in the market. The popularity of white sugar has, therefore, not much affected the production of *gur* and *khandsari*, which are imported even from places outside the district. 26 units engaged in *gur* and *khandsari* in 1966-67 produced goods worth Rs. 4.80. lakhs.

50. **Handicrafts.**—Punjab is justly proud of its rich and remarkable heritage of industrial arts and crafts. The Land of Five Rivers is rightly renowned for its notable contribution to the art of embroidery, especially the unique *phulkari* work, which until recently used to be common in rural areas. Fine and soft embroidered shawls and artistic multi-design and colourful bed-spreads and *kheses* are some of the well known handicrafts of the district. Traditional pottery wares, dolls, toys, basketry and artistic bamboo articles are also characteristic crafts of this area.

These cottage industries not only provide gainful primary or subsidiary occupation to a large number of people in the rural and urban areas, but also serve as a medium of self-expression. Long period of foreign rule and the impact of the Western mode of life and import of cheap foreign goods were largely

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[20] Sugar industry in the modern sense meaning white sugar industry, is new in India Indigenous production of sugar usually consisted of brown sugar popularly known as *gur*. Although *gur* is simply unrefined sugar its nutritive value is far greater than that of the white sugar. White sugar was also being manufactured under the *khandsari* process.

responsible for the progressive deterioration of most of the traditional handicrafts.

The partition dealt a severe blow to the large numbers of skilled craftsmen who had to leave the district and also gave a severe set-back to the mixed economy. The mass migration of Muslims adversely affected industrial arts and crafts. The people and the Government had thus to grapple with a very difficult situation. The innate fortitude and mettle of the people and the willing help by the Government arrested the decadence in economy.

The placing of our handicrafts on a sound and stable economic footing is a very difficult problem. Their diversity and wide diffusion through the countryside complicated the organisational problem. In a country like India, with a very low *per capita* income, the economy of handicrafts is bound to have weak foundations. In the present day economic set-up, whatever the degree of skill and competence, it is difficult for an individual craftsman to stand in isolation and survive in the face of strong competetive pressures. The remedy lies in creating a proper association or organisation of craftsmen.

The best organisation in which lay hope of survival for this loosely organised sector is the co-operative pattern. This pattern has already proved its worth in handloom co-operatives. Industrial co-operatives in other fields are also gaining ground. The co-operative idea has come to stay and it is hoped that the organisational weakness from which handicrafts suffer will be largely met as co-operatives in this field gain in strength and stability. The policy of the State Government has been to encourage the formation of the co-operatives of artisans and craftsmen. Upto June 30, 1966, 25 handicrafts co-operative societies for women and 4 for men with a membership of 267 and 43 workers, respectively, were organised in the district.

The inadequacy of finances for day-to-day working is another serious hurdle. The credit institution for the supply of capital requirements of this sector are ill-developed. As far as possbile, requirements are being met under the provisions of the State Aid to Industries Act, 1935.

The State Government is also channelising its funds for credit to industrial co-operatives, including handicrafts co-operatives, through co-operative financing institutions. Separate industrial co-operative banks have been set up for this purpose. These banks provide credit facilities to handicrafts workers in the co-operative field on easy terms.

(j) Role of Industrial Co-operatives

The role of co-operatives in the sphere of industrial development has been recognised. An average industrial worker, particularly in rural areas, does not

possess sufficient capital for installing improved type of machinery. Apart from this, he requires raw material and working capital for running his unit. After production of goods, their sale at such prices as can bring adequate return to the worker, is equally essential. In short, credit, raw material and marketing of finished goods are three important requirements of an industrial worker. The best solution of these difficulties seems to be organisation of co-operatives of industrial workers. It provides two distinct advantages : requisite facilities by the Government and the pooling of capital and skill.

The industrial co-operative movement has made considerable progress in the district. The industrial co-operatives governing hosiery goods are the most organised and 90 per cent of the production of hosiery co-operatives in the country is from Ludhiana. The other co-operatives of note cover cycle-parts, sewing-machine parts, etc. The following table indicates the industrial co-operative societies working in the district up to June, 1966 :—

Serial No.	Name of Industry		No. of Societies
1	Handloom Weaving	..	97
2	Small-scale Industries—		
	(a) Leather goods	..	26
	(b) Engineering Industries	..	89
	(c) Wood work		14
	(d) Miscellaneous (brick kilns, hosiery, etc.)	..	111
3	*Khadi* and Village Industries—		
	(a) Non-edible Oils and Soap Industries	..	12
	(b) Pottery	..	1
	(c) *Gur and Khandsari*	..	6
	(d) *Ghani* oil	..	13
	(e) Cobblers	..	102
	(f) Leather tanning and flaying of skins	..	19
	(g) Others		3
	(h) Handicrafts	..	4

The value of the goods produced by these societies, during the years ending June, 1965 and 1966, is given below :

Industrial Co-operatives	Year ending June, 1965	Year ending June, 1966
	Rs.	Rs.
I. Handloom Weaving ..	1,34,630	79,018
II. *Khadi* and Village Industries ..	1,08,420	56,820
III. Small-scale Industries (including handicrafts)	2,72,215	18,36,550

The District Co-operatives Industrial Union, which looks after the sale of manufactured goods and supply of raw materials to various co-operative societies in the district, was registered on October 5, 1950. It has its sale depot at Ludhiana. The affairs of the Union are looked after by a Board of Directors of ten members. It has a membership of 152 societies including 18 individuals.

The administrative control of the industrial co-operatives was transferred to the Industries Department in September, 1963, prior to which these co-operatives were under the Co-operative Department. The Deputy Registrar, Industrial Co-operatives, Ludhiana, attends to the field work throughout the State. He has under him the Industrial Assistant Registrars, Co-operative Societies, Jullundur, Ludhiana, Amritsar and at the State headquarters.

The development of industrial co-operatives in the district is looked after by the Industrial Assistant Registrar, Co-operative Societies, Ludhiana, who is assisted by 5 Inspectors, 16 Sub-Inspectors (including 2 Handloom Sub-Inspectors), Statistical Assistant, and other miscellaneous staff.

Details regarding the loans and subsidies advanced to the co-operative societies, during the years 1964-65 and 1965-66, are given below :

Particulars	1964-65		1965-66	
	Loan	Subsidy	Loan	Subsidy
	Rs.	Rs.	Rs.	Rs.
Weaver's Societies ..	53,814	2,280	51,660	900
Small-scale Industries Societies ..	2,99,543	36,540	2,38,957	22,095
Khadi Societies ..	48,778	—	86,516	—
Handicrafts Societies ..	—	—	—	—

A weavers colony is under construction near the Model Town, Ludhiana.

(k) Manufacturers' Associations

The registered manufacturers' associations functioning in the district in 1965 were as under :

Serial No.	Name of Association	Date of Registration
1	Home Hosiery Manufacturers' Union, Ludhiana ..	September 4, 1941
2	Northern India Hosiery Manufacturing Corporation, Ludhiana ..	July 28, 1950
3	Bharat Hosiery Manufacturers' Association, Ludhiana ..	May 24, 1951
4	Shawl Manufacturers Association' Ludhiana ..	July 20, 1961
5	Hosiery Industry Welfare Board, Ludhiana ..	September 18, 1961
6	Ludhiana Machine Tools Makers Guild, Ludhiana ..	October 24, 1961
7	Cottage Hosiery Manufacturers' Association, Ludhiana ..	July 2, 1962
8	Ludhiana Foundry and Engineers Association, Ludhiana ..	July 18, 1962
9	Ludhiana Knitting Wool Processors' Merchants Society, Ludhiana ..	August 21, 1962
10	Ludhiana Hosiery Small-scale Union, Ludhiana ..	October 16, 1962
11	Hand Knitting Wool Processers' Welfare Society, Ludhiana ..	October 19, 1962
12	Hosiery Industry Federation, Ludhiana ..	November 14, 1962
13	Interlock Cloth and Banyan Manufacturers' Association, Ludhiana ..	January 28, 1963
14	Ludhiana Cycle Parts Suppliers Association, Ludhiana ..	April 1, 1963
15	Ludhiana Electroplaters' Association, Ludhiana ..	July 30, 1963
16	Banyan Manufacturers' Association, Ludhiana ..	August 16, 1963

(I) Industrial Labour

The industrial labour in the district is mostly drawn from the local population or from the neighbouring villages. They live in all localities including slum areas and industrial colonies. Besides, a good number return to the neighbouring villages. The industrial expansion in the district has provided an incentive to the agricultural labour to switch over to industry.

The Industrial Training Institute, Institute of Textile Chemistry and Knitting Technology, and Industrial Schools now increasingly meet the demand for skilled labour and thereby greatly help the development of industries in the district.

Labour and Employees Organisations.—The following is the list of registered industrial workers' unions as it stood in 1965 :—

Serial No.	Name of Union		Date of Registration
1	Hosiery Workers' Union, Ludhiana	..	February 21, 1952
2	District Textile Workers' Union, Ludhiana	..	June 10, 1955
3	Hosiery Workmen Association, Ludhiana	..	February 6, 1959
4	Ludhiana Iron and Steel Workers' Union, Ludhiana	...	September 29, 1959
5	District Iron and Steel Workers' Union, Ludhiana	..	November 10, 1959
6	General Labour Union, Khanna	..	May 28,1960
7	Hosiery Mazdoor Union, Ludhiana	..	July 27, 1962
8	Pearl Woollen Mills' Workers Union, Ludhiana		August 21, 1962
9	Chakki Mazdoor Union, Ludhiana	..	November 3, 1962
10	Cycle Mazdoor Sangh, Ludhiana	..	April 11, 1963
11	Metal Mazdoor Sangh, Ludhiana	..	June 1, 1963
12	Dyeing and Finishing Workers' Union, Ludhiana		June 12, 1963
13	Ludhiana Textile Mazdoor Union, Ludhiana	..	October 5, 1963

Serial No.	Name of Union	Date of Registration
14	Woollen Mills' Workers Association, Ludhiana	November 4, 1963
15	Supreme Karamchari Union, Ludhiana ..	November 8, 1963
16	National Saw Mills Mazdoor Union, Ludhiana	December 26, 1963
17	District Engineering Workers' Union, Ludhiana	January 20, 1964
18	Hosiery Mazdoor Sangh, Ludhiana ..	February 12, 1964
19	Press Workers' Union, Ludhiana ..	August 12, 1964
20	Krishna Roller and Flour Mills' Workers Union, Ludhiana ..	May 13, 1965

(*Source* :—*Labour Commissioner, Punjab, Chandigarh.*)

सत्यमेव जयते

APPENDIX

Particulars of Industries in Ludhiana District

Serial No.	Name of Industry	Year	No. of units	Production		Average employment
				Quantity	Value	
					(Rs. in lakhs)	
	Industries in Large-scale Sector					
1	Woollen Textile ..	1961-62	15		296.15	1,553
		1962-63	15		403.82	1,887
		1963-64	17		469.76	2,417
		1964-65	19		461.65	3,152
		1965-66	19		424.27	3,160
		1966-67	..		..	..
2	Bicycles ..	1961-62	2	Nos. 78640	..	277
		1962-63	2	Nos. 105507	134.58	377
		1963-64	2	Nos. 139024	177.04	397
		1964-65	2	Nos. 168146	212.41	413
		1965-66	2	Nos. 191826	229.03	428
		1966-67	2		295.00	496

Serial No.	Name of Industry	Year	No. of units	Production		Average employment
				Quantity	Value	
					(Rs. in lakhs)	
3	Sewing Machines and Sewing Machine Parts	1961-62	3	Nos. 35469		300
		1962-63	3	Nos. 40881	..	335
		1963-64	3	Nos. 50332	62.90	402
		1964-65	4	Nos. 61559	89.15	652
		1965-66	4	Nos. 47793	51.38	587
		1966-67	4		73.88	650
4	Machine Tools ..	1961-62	3		31.21	454
		1962-63	3		50.52	527
		1963-64	3		52.54	760
		1964-65	3		75.32	779
		1965-66	3		63.10	686
		1966-67	3		67.55	636
5	Automobiles ..	1961-62	—		—	—
		1962-63	1		9.82	107
		1963-64	1		15.34	149
		1964-65	1		13.5	202
		1965-66	1		19.08	236
		1966-67	1		34.89	298
6	Card Clothing ..	1961-62	—		—	—
		1962-63	1		4	94
		1963-64	1		4.5	105
		1964-65	1		18.27	175
		1965-66	1		16.90	40
		1966-67	1		15.00	45
7	Stapple Spinning ..	1961-62	—		—	—
		1962-63	1		..	..
		1963-64	1		11.45	312
		1964-65	1		11.50	200
		1965-66	1		10.79	200
		1966-67	1		30.11	22[illegible]

Serial No.	Name of Industry	Year	No. of Units	Production		Average employment
				Quantity	Value	
					(Rs. in lakhs)	
8	Gas (oxygen) ..	1961-62	—		—	—
		1962-63	—		—	—
		1963-64	1	Cylinders 6287	0.72	25
		1964-65	2	Cylinders 49579	4.43	56
		1965-66	2	Cylinders 52914	4.63	53
		1966-67	2	..	9.30	60
9	Nylon	1961-62	—		—	—
		1962-63	—		—	—
		1963-64	—		—	—
		1964-65	1		4	25
		1965-66	1		5.50	30
		1966-67	1		7.50	24
10	Nuts ..	1961-62	—		—	—
		1962-63	—		—	—
		1963-64	—		—	—
		1964-65	1		28.84	152
		1965-66	1		27.15	176
11	Measuring Tapes	1961-62	—		—	—
		1962-63	1		14.67	100
		1963-64	1		15.66	105
		1964-65	1		15.50	118
		1965-66	1		16.50	120
		1966-67	1		—	—
12	Steel Re-rolling	1961-62	—		—	—
		1962-63	—		—	—
		1963-64	—		—	—
		1964-65	—		—	—
		1965-66	1	1909 Metric tonnes	13.84	50
		1966-67	1		—	—

Serial No.	Name of Industry	Year	No. of Units	Production		Average employment
				Quantity	Value	
					(Rs. in lakhs)	
13	Flour Mills ..	1961-62	2	6197.55 Metric tonnes	..	125
		1962-63	2	13970.61 Metric tonnes	..	139
		1963-64	2	51750 Metric tonnes	..	158
		1964-65	2	2984.4 Metric tonnes	134.31	140
		1965-66	2	1804.54 Metric tonnes	93.52	108
		1966-67	2		67.87	104
		Industries in Small-Scale Sector				
14	Agricultural Implements ..	1961-62	57		25.20	200
		1962-63	62		23.12	210
		1963-64	64		23.13	215
		1964-65	67		23.25	221
		1965-66	67		23.00	215
		1966-67	68		23.06	217
15	Machine Tools ..	1961-62	152		132.00	2,700
		1962-63	155		142.00	2,720
		1963-64	157		144.00	2,750
		1964-65	204		150.00	2,760
		1965-66	244		175.00	3,123
		1966-67	255		225.00	3,150
16	Bicycles and Bicycle Parts					
	Bicycles ..	1961-62	21	Nos. 36913	..	5,950
		1961-62	500	..	970.00	
		1962-63	9	Nos. 43772	..	
		1962-63	503	..	650.00	2,050
		1963-64	9	Nos. 44100	..	
		1963-64	510	..	660.00	5,775
		1964-65	9	No. 44176	..	
		1964-65	512	..	670.00	5,800
		1965-66	9	Nos. 42000	..	
		1965-66	554	..	667.00	5,715

Serial No.	Name of Industry	Year	No. of Units	Production Quantity	Production Value (Rs. in lakhs)	Average employment
		1966-67	9	..	..	
		1966-67	558	Nos. 42500	666.00	5,720
17	Sewing Machines and Parts—Sewing Machines, Sewing Machine Parts	1961-62	10	Nos. 16090	..	
		1961-62	190	..	120.00	2,000
		1962-63	17	Nos. 16456	..	
		1962-63	194	..	180.90	2,040
		1963-64	18	Nos. 16540	..	
		1963-64	194	..	182.00	2,550
		1964-65	18	Nos. 16550	..	
		1964-65	194	..	182.00	2,225
		1965-66	18	Nos. 14000	..	
		1965-66	194	..	165.00	2,050
		1966-67	18	Nos. 14500	165.00	
		1966-67	194	..	..	2,050
18	Steel Re-rolling	1961-62	3	4933 Metric tonnes	3.70	62
		1962-63	3	4900 Metric tonnes	3.73	92
		1963-64	3	4910 Metric tonnes	3.78	95
		1964-65	3	4920 Metric tonnes	3.79	97
		1965-66	12	9840 Metric tonnes	7.58	185
		1966-67	12	9872 Metric tonnes		185
19	Water Pipe Fittings ..	1961-62	2		1.01	20
		1962-63	3		3.00	34
		1963-64	3		3.00	36
		1964-65	4		3.09	37
		1965-66	4		2.50	30
		1966-67	4		2.6	30
20	Bolts and Nuts ..	1961-62	15		21.50	130
		1962-63	20		24.90	152
		1963-64	22		25.00	160
		1964-65	61		41.00	816
		1965-66	107		67.00	1,100

Serial No.	Name of Industry	Year	No. of Units	Production Quantity	Production Value	Average employment
					(Rs. in lakhs)	
		1966-67	107		67.05	1,100
21	Electrical Goods ..	1961-62	21		8.50	237
		1962-63	28		16.90	210
		1963-64	33		16.95	215
		1964-65	40		17.97	225
		1965-66	40		20.00	250
		1966-67	40		20.05	255
22	Surgical Instruments ..	1961-62	2		2·10	25
		1962-63	2		2·10	24
		1963-64	2		2·12	25
		1964-65	2		2·13	27
		1965-66	2		2·00	24
		1966-67	2		2·05	25
23	Power Loom ..	1961-62	320		..	3,070
		1962-63	320		..	4,560
		1963-64	320		..	4,540
		1964-65	320		722·60	5,957
		1965-66	569		507·00	5,500
		1966-67	570		502·25	5,200
24	Hosiery ..	1961-62	950		450·00	..
		1962-63	1363		715·00	25,630
		1963-64	1420		750·00	28,000
		1964-65	1709		760·00	28,800
		1965-66	1887		700·00	28,000
		1966-67	2000		8,000·00	13,500
25	Cotton Ginning and Pressing ..	1961-62	21	50,000 Bales	..	710
		1962-63	12	25,000 Bales	..	650
		1963-64	12	25,500 Bales	..	680

Serial No.	Name of Industry	Year	No. of Units	Production Quantity	Production Value	Average employment
					(Rs. in lakhs)	
		1964-65	12	25,600 Bales	..	700
		1965-66	12	25,000 Bales	..	675
		1966-67	12	25,500 Bales	..	680
26	Conduit Pipes ..	1961-62	6		6·00	60
		1962-63	6		6·5	60
		1963-64	6		6·60	65
		1964-65	6		6·65	70
		1965-66	6		5·50	55
		1966-67	6		5·02	55
27	Automobile Parts ..	1961-62	..		..	..
		1962-63	..		..	..
		1963-64	87		65·20	1,100
		1964-65	123		90·00	1,500
		1965-66	148		112·00	1,590
		1966-67	148		112·05	1,595
28	Plastic Goods ..	1961-62	—		—	—
		1962-63	9		4·05	60
		1963-64	10		5·00	65
		1964-65	11		8·50	70
		1965-66	14		9·83	80
		1966-67	15		9·75	80
29	Paints and Varnishes ..	1961-62	—		—	—
		1962-63	1		·95	6
		1963-64	1		98	8
		1964-65	1		2·00	13
		1965-66	1		2·84	10
		1966-67	1		3·15	8

Serial No.	Name of Industry	Year	No. of Units	Production Quantity	Production Value	Average employment
					(Rs. in lakhs)	
30	Umbrella Ribs ..	1961-62	2		7·5	150
		1962-63	2		7·5	151
		1963-64	2		7·5	151
		1964-65	2		10·00	344
		1965-66	1		14·00	175
		1966-67	1		15·05	175
31	Radio Assembling ..	1961-62	20	2,500 Sets	3·75	80
		1962-63	27	3,250 Sets	4·50	90
		1963-64	30	3,600 Sets	4·51	100
		1964-65	30	3,800 Sets	4·81	102
		1965-66	44	4,300 Sets	5·46	104
		1966-67	44	4,500 Sets	5·75	106
32	Rubber Goods ..	1961-62	4		2·5	60
		1962-63	4		2·4	40
		1963-64	4		2·4	42
		1964-65	7		3·50	50
		1965-66	9		3·35	55
		1966-67	9		3·45	55
33	Stationery Articles ..	1961-62	5		3·05	48
		1962-63	5		3·25	45
		1963-64	5		3·25	46
		1964-65	5		4·00	48
		1965-66	5		3·75	48
		1966-67	5		4·75	30
34	Measuring Tapes ..	1961-62	5		5·00	90
		1962-63	4		4·05	70
		1963-64	4		4·06	75
		1964-65	4		4·70	77

Serial No.	Name of Industry	Year	No. of Units	Production: Quantity	Production: Value	Average employment
					(Rs. in lakhs)	
		1965-66	4		7·09	44
		1966-67	4		7·12	44
35	Snap Button ..	1961-62	1		3·50	22
		1962-63	3		4·25	25
		1963-64	3		4·25	25
		1964-65	3		4·26	27
		1965-66	3		4·65	24
		1966-67	3		4·75	24
36	Spray Pumps ..	1961-62	1		14·31	50
		1962-63	1		14·78	55
		1963-64	1		14·78	57
		1964-65	1		14·80	65
		1965-66	1		25·00	55
		1966-67	1		4·12	80
37	Steel Furniture ..	1961-62	—		—	—
		1962-63	—		—	—
		1963-64	—		—	—
		1964-65	—		—	—
		1965-66	3		6·50	78
		1966-67	3		6·10	80
38	Washing Soap	1961-62	33		22·00	132
		1962-63	50		25·00	161
		1963-64	50		26·00	180
		1964-65	80		27·00	260
		1965-66	94		28·05	280
		1966-67	94		29·00	280
39	Zip Fastener ..	1961-62	—		—	—
		1962-63	—		—	—

Serial No.	Name of Industry		Year	No. of Units	Production		Average employment
					Quantity	Value	
						(Rs. in lakhs)	
			1963-64	1			
			1964-65	1		0·5	25
			1965-66	1		1·92	35
			1966-67	1		2·05	40
40	Diesel Engine	..	1961-62	—		—	—
			1962-63	—		—	—
			1963-64	7		14·44	116
			1964-65	9		18·00	136
			1965-66	10		16·00	132
			1966-67	10		17·25	140
41	Casting/Forging	..	1961-62	—		—	—
			1962-63	—		—	—
			1963-64	107		24·00	1,114
			1964-65	119		26·00	1,174
			1965-66	140		38·00	1,200
			1966-67	140		39·25	1,225
42	Chemicals	..	1961-62	2		2·00	18
			1962-63	3		1·01	18
			1963-64	3		1·02	20
			1964-65	3		1·20	19
			1965-66	3		1·20	21
			1966-67	3		2·03	20
43	Scooters	..	1961-62	—		—	—
			1962-63	—		—	—
			1963-64	1		0·89	35
			1964-65	1	Nos. 354	5·65	51
			1965-66	1	Nos. 2014	33·62	155
			1966-67	1		9·00	170
44	Hosiery Needle	..	1961-62	1		2.38	130
			1962-63	1		2.85	130
			1963-64	1		2.86	132
			1964-65	1		2.82	100

Serial No.	Name of Industry	Year	No. of Units	Production Quantity	Production Value	Average employment
					(Rs. in lakhs)	
		1965-66	1		10.00	40
		1966-67	1		2.10	44
	Village Industries					
45	Handloom Weaving ..	1961-62	1220		69.10	2,200
		1962-63	1220		60.00	2,200
		1963-64	1260		62.00	2,500
		1964-65	1265		62.02	2,506
		1965-66	1274		59.05	2,450
		1966-67	1275		60.05	2,460
46	Leather and Hides Tanning ..	1961-62	440		..	1,050
		1962-63	460		54.20	900
		1963-64	455		41.65	870
		1964-65	450		41.10	872
		1965-66	450		35.60	872
47	Shoes and Leather Goods ..	1961-62	1100		13.05	3,100
		1962-63	1100		9.00	3,100
		1963-64	1120		9.15	3,128
		1964-65	1125		9.16	3,129
		1965-66	1130		9.20	3,135
		1966-67	1135		1.30	3,145
48	*Kohlu*— (Village Oil Presses) ..	1961-62	12		1.20	150
		1962-63	12		1.20	150
		1963-64	10		1.00	126
		1964-65	10		1.01	128
		1965-66	10		1.05	120
		1966-67	10		1.15	121
49	*Ban* and Rope making ..	1961-62	70		0.85	160
		1962-63	71		0.90	165

Serial No.	Name of Industry	Year	No. of Units	Production: Quantity	Production: Value	Average employment
					(Rs. in lakhs)	
		1963-64	75		1.00	170
		1964-65	76		0.97	172
		1965-66	70		1.00	170
		1966-67	70		1.05	175
50	*Gur* and *Khandsari* ..	1961-62	4		4.73	75
		1962-63	17		4.25	100
		1963-64	25		4.50	120
		1964-65	26		4.52	123
		1965-66	26		4.75	125
		1966-67	26		4.80	128
51	Handicrafts ..	1961-62	—		—	—
		1962-63	4		3.00	50
		1963-64	4		2.90	45
		1964-65	4		2.92	46
		1965-66	4		3.00	48
		1966-67	4		3.05	50

CHAPTER VI

BANKING, TRADE AND COMMERCE

(a) Banking and Finance

History of Indigenous Banking.—Banking has been practised in India since ancient times. There are innumerable references in ancient literature to the very efficient system of banking in India, which financed trade and commerce. This system continues working to the present day in spite of the opening of a large number of banks run on modern lines. It is difficult to trace the history of indigenous banking in the area now comprising Ludhiana district. Since very early times the people were accustomed to the use of credit instruments like *hundis*, etc. Muslim historians of the 12th century also refer to the existence of Multanis and Shroffs who financed internal trade and commerce and were also the bankers to the ruling dynasties. It is also believed that the foreign trade was chiefly financed by the indigenous bankers. Apart from money-lending function that these bankers were performing, even more important was the business of money changing, so necessary in those days when a large number of mints issued metallic currency of various denominations causing great embarrassment to the general public. They also acted as revenue collectors, bankers and money changers to the Government. Judged from their power and influence, the Jaget Seths or World Bankers of the 17th and 18th centuries, indeed, seem to have fulfilled many of the functions of a Central Bank—essentially a modern institution. The existence of this system is corroborated by the accounts of travellers and *Ain-i-Akbari*. Besides, people forced by vagaries of weather resulting in the frequent failure of crops, were compelled to knock at the door of the *sahukar* to borrow money to meet their urgent domestic needs. The *sahukar* was at liberty to charge any rate of interest. Apart from higher rates of interest, the borrower was under personal obligation to the money-lender till he was able to clear his debt. There were numerous instances where the interest increased many times the principal, and the borrower, being unable to discharge the debt, had to get his belongings, including land, attached. Before the advent of the British, this problem of rural indebtedness was not very acute. The types of cases were handled by the village panchayats. These panchayats watched the interest both of the borrower and the money-lender and they never allowed the money-lender to resort to extreme measures, viz., attachment of land and property. These panchayats prevailed upon the money-lender to be considerate. Being a shopkeeper as well as a money-lender, the *sahukar* generally preferred to get the produce, on which, without much effort

he could reap a double profit, one from the producer to whom he lent money and the other from the consumer to whom he sold the produce. He was, therefore, content with the crop and shared with the State the whole of the cultivator's surplus. This continued to be the case for the first twenty years of British rule. After 1870, circumstances changed ; land became a first rate investment which was always rising in value. As soon as he realised this, the money-lender began to use it as an outlet for his rapidly accumulating capital, and, finding the investment more and more profitable, sought with increasing ingenuity to get the cultivator into his clutches and oust him from his land ; and it was always the better land he coveted; the inferior he avoided. He imposed such hard terms in his mortgages that a mortgage nearly always ended in sale. Land was thus becoming the property of the *sahukars* or money-lenders. The British realised this serious problem of rural indebtedness and felt that unless some antidote was given, the evil might alienate the rights of the tillers of the soil and pass on the land to money-lenders. It was this phenomenon, more than any other factor, which led to the passing of the Punjab Alienation of Land Act, 1900 (XIII of 1900). Since then the money-lender had to be content with the produce; and a new class of agriculturist money-lender came to the fore. The bulk of the usufructuary mortgage debt passed into their hands and they rapidly increased their operations during the period of prosperity which followed the World War I (1914—18).

The passage of the Punjab Alienation of Land Act, 1900 (XIII of 1900), however, did not better the lot of the tillers. The *sahukar*, deprived by the Act of the security of the land, could only lend up to the limit of what could be repaid from the produce. But the agriculturist money-lender, to whom the Act did not apply could afford to lend up to the value of the land. He was at liberty to offer commanding terms to the tillers. It might be supposed that the Jat would be the more merciful of the two, as he was dealing with his own kith and kin. This, however, was not the opinion of the countryside : "He often charges less at the start and is certainly less cunning in his devices, but most agree that he is avaricious and exacting, and that, being .... in a stronger position than the *sahukar*, he recovers a larger proportion of his charges". There is a truth in the old saying, 'The cock and the crow nourish their families ; the Jat and the crocodile destroy them'. The *sahukar* will occasionally forgo part of his interst, but, as a villager in Ludhiana remarked, 'a Jat forgoes nothing-not even a pebble (*giti*);"[1] Thus , if the Punjab Alienation of Land Act, 1900 (XIII of 1900) rescued the sheep from the wolf, it had only been to hand them over to the butcher. The Act thus aggravated the difficulties of the borrowers instead of lessening them. The agriculturist money-lenders were more cruel than the rural money-lenders (*sahukars*) and were always on the look out for the misfortune of the borrowers.

1. Malcolm Darling, *The Punjab Peasant in Prosperity and Debt*, 1947, p. 199.

This class of village money-lenders along with the Bania was adversely affected with the passing of the Punjab Regulation of Accounts Act, 1930, the Punjab Relief of Indebtedness Act, 1934, the Punjab Debtors' Protection Act, 1936, and the Punjab Registration of Money-lenders Act, 1938. The agriculturist money-lender explored other channels to invest his surplus funds and finally he was effectively checked when the Punjab Alienation of Land Act, 1900 (XIII of 1900) was repealed with the enforcement of the Constitution on January 26, 1950.

General Credit Facilities.—In the field of rural finance, the supermacy of the Bania or the village money-lender is still unchallenged. It is due to inadequate funds at the disposal of Co-operative Department, and to the fact that the ruralites have not yet understood the proper meaning of co-operation. Moreover, they have not yet realised the benefits of thrift and saving. The whole co-operative structure is based on credit, and thrift is there only in name Nevertheless, co-operation has succeeded in lessening if not in rooting out the fraudulent practices hitherto adopted by the Bania or *sahukar*.

There are several methods of advancing loans, such as loans on personal surety, against] produce, land, ornaments, property, etc. Sometimes the rural money-lender advances loans against a cow or buffalo. Generally, he advances 60 to 70 per cent of the face value of the property pledged against the loan advanced. The rate of interest is generally higher for the loans advanced on personal surety as compared to those advanced against property. As the Punjab Regulation of Accounts Act, 1930, necessitates the maintenance of accounts, most of the transactions in the village are made either orally or against ornaments.

The indigenous money-lender played an important role in providing the industrial and rural finance. The passing of the Punjab Regulation of Accounts Act, 1930, affected the private money-lending business adversely. Some of professional money-lenders gave up their trade and took up other professions. However, the hereditary money-lenders continue this business because they find it more profitable. The business of money-lending is regulated under the Punjab Money-Lenders Act, 1938. Money-lenders have to maintain regular accounts in the books prescribed under the Act. Besides, the money-lenders are to get themselves registered with the Collector and get a licence under the provisions of the Punjab Registration of Money-Lenders Act, 1938. The number of registered money-lenders in the district in 1966 was 20. Besides, there are several un-registered money-lenders. Their number is not authoritatively known.

Besides the indigenous money-lender, loans are also obtained from Government institutional credit agencies ; such as the Punjab Financial

Corporation, Khadi and Village Industries Commission, Joint-Stock Banks, and Co-operative Societies. The Punjab Financial Corporation and Khadi and Village Industries Commission cater to the financial needs of large and medium scale and Khadi and Village Industries, respectively.

The *taccavi* loans for seed, cattle, or agricultural implements are made available by the Government. The loans are also advanced under the State Aid to Industries Act, 1935. Loans advanced by Government as *taccavi* loans and under the State Aid to Industries Act, 1935, are detailed in chapters 'Agriculture and Irrigation' and 'Industries'. The Co-operative Societies advance loans against promissory notes, while the banks do so against gold, shares and securities, agricultural commodities and other easily marketable goods.

Rate of Interest.—The loans advanced by the co-operative societies carry interest ranging from 2½ per cent to 8 per cent. Loans advanced under the State Aid to Industries Act, 1935, carry interest from 2½ per cent to 6½ per cent. The joint-stock banks advance loans against jewellery at the rate of 6 to 9 per cent. The indigenous money-lenders charge interest varying from 9 per cent to 36 per cent. Usually, the interest charged by them is more than 30 per cent but in exceptional cases it is about 9 per cent, depending on the risk involved and the credit-worthiness of the borrower. The loans advanced by the unregistered money-lenders carry higher rates of interest usually ranging from 60 per cent to 100 per cent per annum. The scale of the rate of interest depends upon the nature of the loan and on the position of the borrowers. In some cases, the interest is recovered in kind when it is charged at harvest time. For instance a *sahukar* lends a quintal of wheat and he recovers one and a half quintals at the time of harvesting.

Joint Stock Banks.—The following is a tahsilwise list of joint-stock banks in the district:—

Ludhiana Tahsil

1. The State Bank of India, Civil Lines Branch, Ludhiana.
2. The State Bank of India, Miller Ganj Branch, Ludhiana.
3. The State Bank of India, Kesar Ganj (Pay Office), Ludhiana.
4. The Punjab National Bank Ltd., Civil Lines Branch, Ludhiana. It was established as Pay office in 1946 and converted into Branch Office in 1949.
5. The Punjab National Bank Ltd., Chaura Bazar Branch, Ludhiana. It was established in 1911.

6. The Punjab National Bank Ltd., Miller Ganj Branch, Ludhiana. It was established as Pay Office in April, 1948 and was converted into Branch Office in 1960.

7. The Punjab National Bank Ltd., Kesar Ganj, Ludhiana. It is a Pay Office and was opened in July, 1958.

8. The Allahabad Bank Ltd., Saban Bazar Branch, Ludhiana.

9. The Oriental Bank of Commerce Ltd., Chaura Bazar Branch, Ludhiana.

10. The Central Bank of India Ltd., Saban Bazar Branch, Ludhiana.

11. The Central Bank of India Ltd., Miller Ganj (Pay Office), Ludhiana.

12. The Central Bank of India Ltd., Civil Lines Sub-Branch, Ludhiana.

13. The United Commercial Bank Ltd., Chaura Bazar Branch, Ludhiana.

14. The United Commercial Bank Ltd., Miller Ganj Branch, Ludhiana.

15. The Punjab and Sind Bank Ltd., Branch Office, Ludhiana.

16. The Ludhiana Central Co-operative Bank Ltd., Head Office, Civil Lines, Ludhiana.

17. The Ludhiana Central Co-operative Bank Ltd., Branch Office, Malaudh.

18. The Indian Overseas Bank Ltd., Clock Tower, Ludhiana.

19. The Bank of Baroda Ltd., Chaura Bazar Branch, Ludhiana.

20. The National Bank of Lahore Ltd., Chaura Bazar Branch, Ludhiana.

21. The Bank of India Ltd., Branch Office, Ludhiana.

22. The New Bank of India Ltd., Chaura Bazar Branch, Ludhiana.

23. The State Bank of Patiala, Miller Ganj Branch, Ludhiana.

24. The Sahukara Bank Ltd., Chaura Bazar Branch, Ludhiana.

25. The Sahukara Bank Ltd., Miller Ganj Branch, Ludhiana.

The Sahukara Bank is the only Non-Scheduled Bank and has two branches at Ludhiana. It was established in 1912. Being a Non-Scheduled Bank, it has its own rates of interest both for deposits and loans; and does not abide by the 'Banks Revised Agreement' on interest. It charges the rate

of interest varying from 7 to 12 per cent on loans advanced, keeping in view the nature and extent of the loan advanced.

Samrala Tahsil

1. The State Bank of India, Pay Office, Khanna.
2. The Punjab National Bank Ltd., Branch Office, Khanna.
3. The Punjab National Bank Ltd., Pay Office, Samrala.
4. The Ludhiana Central Co-operative Bank Ltd., Branch Office, Samrala.
5. The Ludhiana Central Co-operative Bank Ltd., Branch Office, Khanna.
6. The Central Bank of India, Pay Office, Khanna.
7. The Central Bank of India Ltd., Branch Office, Machhiwara.

Jagraon Tahsil

1. The State Bank of India, Branch Office, Jagraon.
2. The Punjab National Bank Ltd., Pay Office, Jagraon.
3. The Ludhiana Central Co-operative Bank, Ltd., Branch Office, Jagraon.
4. The Ludhiana Central Co-operative Bank Ltd., Branch Office, Raikot.
5. The Oriental Bank of Commerce Ltd., Branch Office, Jagraon.
6. The Central Bank of India Ltd., Branch Office, Jagraon.

Other Loan and Investment Companies

Finance and Chit Fund Companies.—The following Finance and Chit Fund Companies are functioning in Ludhiana :—

1. Nankana Sahib Finance, Private Limited, Ludhiana.
2. Guide Finance and Chit Fund, Private Limited, Ludhiana.
3. Leader Finance and Chit Fund, Private Limited, Ludhiana.
4. Shalimar Finance and Chit Fund, Private Limited, Ludhiana.
5. Upkar Finance and Chit Fund, Private Limited, Ludhiana.
6. Shah Finance and Lucky Schemes, Private Limited, Ludhiana.

7. The Anand Lucky Chit Fund, Private Limited, Ludhiana.

8. Gaylord Finance and Chit Fund, Private Limited, Ludhiana.

Chit Fund or Committee System, as it is generally called, is an ingenious device by which a subscriber gets handsome dividends and financial help through easy instalments. A Chit is formed by a specific number of contributors who have to pay for the same number of months. Each member of the Chit Fund subscribes a certain amount every month and the amount thus collected is made available in lump sum to the members turn by turn, so that each member gets the amount during the tenure of the Chit. The order by which the members get the amount is determined by auction, the amount being given to the person who offers the maximum discount. Out of this discount, the company deducts its fixed commission @ 50 per cent of the proceeds and the balance of discount is equally distributed among the members of that Chit. The prized and non-prized members are both entitled to the dividend. The last member, that is in the last month of the Chit, gets the full amount of the Chit less the company's commission without any auction or security. The membership of the Chit series is open to every person above the age of 18 years with a regular monthly income.

Among the above mentioned Chit Fund Companies, Nankana Sahib Finance and Guide Finance and Chit Fund Companies deserve special mention. The Nankana Sahib Finance Company has been functioning in Ludhiana since 1960 and has, at present, a working capital of 15-20 lakhs. The main objects of this company are hire purchase, housing, general finance, investment, supervision, administration and control of any business or operation. There has been a steady increase in the volume of business of these companies during the recent years.

All these Finance and Chit Fund Companies are registered under the Companies Act, 1956, by the Registrar of Companies, Jullundur. Besides Chit Fund Schemes, these Companies have also started Lucky Schemes and Prize Saving Schemes. One lucky prize of each Group is drawn every month. The Lucky Member gets the fixed prize according to the Group and does not pay any further subscription. Loan is also given by these companies at the rate of 12 per cent to their regular members against promissory notes and securities.

Co-operative Credit.—The co-operative movement in this district was started after the enactment of All India Co-operative Societies Act, 1904, and the subsequent Act of 1912. The first co-operative society in the district was organised and registered in 1910. The movement gradually gained momentum and made much headway with passage of the Acts of 1954 and 1961. In 1965-66, there were 1,564 co-operative societies in the district, of which 1,170 were co-operative credit societies (973 agricultural and 197 non-agricultural).

Besides, a Central Co-operative Bank was also functioning at Ludhiana with branches at Malaudh and Khanna.

Co-operative Credit Societies.—The money-lender provided loans and other essential commodities to the borrowers generally on credit. For the recovery of his dues, he preferred to buy the produce himself at concessional rates. Thus, the two largest factors depleting the peasant's income were the exploitation by the money-lender in his dual capacity as the combined credit agency and the marketing agency. The exploitation by the money-lender worked like double edged blade—high rate of interest on the loans to the poor agriculturists and low return for their produce. The Punjab Registration of Money-Lenders Act, 1938, curbed to some extent the powers of money-lenders. But the organisation of co-operative societies is the measure which assures that the money-lender class might eventually be eliminated.

There were 1,170 co-operative credit (agricultural and non-agricultural) societies in the district in 1965-66. The functions of these societies are to mobilise savings of the members and to advance loans at reasonable rates of interest for productive purposes.

The details regarding the membership and the working of the agricultural and non-agricultural co-operative credit societies functioning in the district during 1956-57 to 1965-66 are given in Appendices I and II on page 322.

Insurance and Small Savings Insurance.— Prior to the establishment of Life Insurance Corporation in the district in 1956, the following companies, covering life and other risks, were functioning :—

1. The Oriental Fire and General Insurance Company Ltd.
2. The New Great Insurance Company Ltd.
3. The Jai Bharat Insurance Company Ltd.
4. The Legal and General Insurance Company Ltd.
5. The New India Insurance Company Ltd.
6. The Sunlight Insurance Company Ltd.
7. The Policy Holders Insurance Company Ltd.
8. The Newzealand Insurance Company Ltd.
9. The Pandyan Insurance Company Ltd.
10. The Hindustan Co-operative General Insurance Company Ltd.
11. The Empire of India, Life Insurance Company Ltd., Ludhiana.

At present (1966), the entire life business in the district is handled by the Life Insurance Corporation of India, whereas the general business is done by the New Great Insurance Company (India) Ltd., The New India Assurance Company Ltd., The Newzealand Insurance Company Ltd., The General Assurance Society Ltd., The Vulcan Insurance Company Ltd., Indian Trade and General Insurance Company Ltd., The Oriental Fire and General Insurance Company Ltd., and The National Insurance Company Ltd.

The Life Insurance Corporation of India covers life risk, while general insurance of every kind except life is carried on by the other companies.

In the district, there was the Branch Office of one company, namely, the Empire of India Life Assurance Company, Ltd., Bombay. whose business was transferred to the Life Insurance Corporation of India on September 1, 1956. Since that date the Life Insurance Corporation has a branch office at Ludhiana. With the expansion of business in the district, an additional branch to further cater for the insurance needs was established at Ludhiana in 1961. In order to intensify its drive for insurance in rural areas, two sub-offices, one at Khanna and the other at Jagraon, were opened with a net work of Development Officers at various centres of the district on March 14, 1961 and April 4, 1960, respectively. These sub-offices are functioning under the control of the Ludhiana Unit I and Ludhiana Unit II, respectively. The Life Insurance Corporation in March, 1966, had 40 Development Officers at Ludhiana (Units I and II), 6 at Jagraon and 9 at Khanna sub-offices for securing business in the district. The number of agents in the district as in March, 1966 was 502.

The business secured by the Life Insurance Corporation of India during the last 10 years is given below [2] :

Year		Number of Policies	Sum assured
			Rs.
1956	..	636	26,80,250
1957	..	2,381	97,00,000
1958	..	2,853	1,38,00,000
1959	..	3,315	1,76,00,000
1960	..	4,256	2,32,51,360

2. These figures also include the bussiness handled by the Life Insurence Corporation of India in Doraha and Payal Police Stations, which were formerly included in tahsil Sirhind of Patiala District.

Year		No. of Policies	Sum assured
			Rs.
1961	..	5,093	2,68,74,400
1962 (1st April, 1962 to 31st March, 1963)	..	5,877	3,20,04,200
1963 (1st April, 1963 to 31st March, 1964)	..	4,853	2,63,64,400
1964 (1st April, 1964 to 31st March, 1965)	..	3,567	2,51,24,500
1965 (1st April, 1965 to 31st March, 1966)	..	3,707	2,61,98,500

(*Source* : Divisional Manager, Life Insurance Corporation of India, Divisional Office, Chandigarh)

Small Savings.—Small Savings is a Central Government sponsored scheme controlled by the Ministry of Finance (Department of Economic Affairs). The National Savings Commissioner for India, with his headquarters at Nagpur, is the Head of the Department of National Savings Organisation. The scheme has been primarily introduced for inculcating the habit of thrift amongst the masses and for raising funds needed for the development of the country by utilizing the small savings of millions of people. Eversince the attack on our borders by the Chinese in October, 1962, this movement has acquired a great significance, as it was felt that the huge funds needed for the defence of the country should come from the small savings of the masses. In the States, National Savings Organisation is headed by the Regional Director, National Savings, Government of India. The Regional Office for Punjab is located at Jullundur. The Regional Director, Punjab, has three Assistant Regional Directors, National Savings, at Jullundur, Bhatinda and Amritsar. In each district, there is a District Organiser, National Savings Scheme. In some of the important districts, there are, however, two district organisers. There are two district organisers at Ludhiana.

In order to have better co-ordination between the Central Organisation and the State Government, Directorates of Small Savings had been set up in the States. The Director, Small Savings, Punjab, Chandigarh, is at the head of the State Government Small Savings Department. At district level, the district organisers are the co-ordinating agency between the Central Organisation and the district authorities. They provide all technical assistance to the district authorities in the promotion and growth of the movement.

The gross and net achievements under the small savings scheme from the year of its inception in the district are given as under :

Year		Gross Achievements	Net Achievements
		Rs.	Rs.
1959-60	..	3,28,68,719	90,32,890
1960-61	..	3,08,53,614	21,40,667
1961-62	..	2,50,53,561	*(—)18,29,339
1962-63	..	2,49,21,894	6,68,462
1963-64	..	2,94,37,384	31,82,492
1964-65	..	3,19,79,087	29,70,799
1965-66	..	3,60,99,181	78,35,839

(*Source* : District Organiser, National Savings Scheme, Ludhiana.)

*In the year 1961-62, withdrawals were heavier than the deposits.

Currency and Coinage.—The decimal coinage was introduced in 1957. It has produced a wholesome effect. The Government issued pamphlets, distributed posters, etc., among the public to facilitate smooth switch over. The conversion tables were displayed at all prominent places of money transactions.

The decimal coinage replaced the old prevalent coinage with effect from April 1, 1964. In the beginning, people felt some difficulty in transactions, as they were accustomed to reckoning under the old coinage system. But gradually people started reckoning in decimal system of coinage. *Nai paise* named in the beginning is now called *paise*. On the withdrawal of the old coinage from circulation, the prefix *Nai* became redundant and was dropped automatically.

(b) Trade and Commerce.—The previous history of trade and commerce of the district does not differ much from that of the other parts of the country. It is practically the same with slight variations. From the western parts of the district, wheat, gram and barley were exported to the eastern parts of the district. *Gur* and *bura* were exported from Machhiwara, the place at that time well-known for the trade. To meet the requirements of the district, *gur* and *bura* were also imported from the Jullundur Doab. Cotton textiles were imported from Bombay Presidency and Amritsar. Iron was imported from Karachi and salt from Jhelum District (West Pakistan).

From the beginning of the present century, import and export trade underwent a change due to better means of transport and improved banking system. Wheat and cotton began to be exported to Europe. Wheat was transported

by railways. Cotton was ginned by the farmers indigenously and was packed in big *boras* (hessian bags) and brought to Khanna market wherefrom it was exported to England. It could not be transported by railway trains due to its poor packing and heavy freight charges. It was, as such, transported by the farmers from Jagraon and Khanna by their own or hired carts in boats and floated by river to Sind for export to England. During the first decade of the present century, Khanna was the biggest cotton market in Northern India and it had earned a name in the international market. With the introduction of ginning machines and improved pressing methods, this trade was revolutionised. Sindhi traders would come to effect purchases at Khanna and export cotton on their own to Europe. It is said that during the first decade of the present century 40,000 bales of cotton were exported from Khanna to Europe.

During the World War I, cotton trade decreased. After the War, the depression faced in the world markets seriously affected cotton trade of Khanna. As a result of the set back, the cultivators changed to other crops. The other crops, especially groundnut, have practically replaced cotton. The cotton trade continued to suffer till partition of the country whereafter it started showing improvement. Till 1966 the district had 12 ginning mills.

The *gur* and *bura* trade of Machhiwara also suffered a set back due to preference shown by people to crystal sugar. During the World War II, however, this trade again showed an uptrend and, to meet the shortage of crystal sugar, people started making *khandsari* by hand-driven machines. After World War II, the abundance of crystal sugar and the strong liking of the people for the refined commodity have again adversely affected this trade of Machhiwara. Consequent upon the mass migration of Muslims from the place in 1947 the industry has been virtually eliminated.

The extensive groundnut cultivation in Samrala tahsil in the second decade of the present century has completely changed the out-look of the farmers of the tahsil in respect of pattern of crops. The shortage of ghee, due to the increasing population, necessitated the increased production of vegetable ghee. Vegetable ghee was cheap and within the reach of the poor. With the opening of vegetable ghee factories that prepared vegetable ghee from groundnut, the cultivation of groundnut became very popular in Samrala tahsil. Samrala is now the biggest groundnut producing tahsil in the district.

A number of cottage industries were started at Ludhiana in the last decade of the 19th century. In the beginning military badges, medals and uniforms were imported from England. The items began to be manufactured locally in due course of time. The Kashmiri migrants had made *Pashmina* trade popular. Socks were also knitted. With the introduction of machinery

for knitting and weaving, *Pashmina* and hand-knitted socks trade also vanished. *khaddar* (course cloth) and *gabrun* (course shirting-cloth) manufactured in Ludhiana was exported throughout India. During World War II, this trade flourished due to the shortage of mill-made cloth. The trade, however, suffered due to de-control of mill-made cloth and also as a result of the partition of 1947.

Course of trade.—The usual course of trade in agricultural produce in the district is through dealers who are members of market committees. The farmers bring their agricultural produce to a nearby *mandi* and dealers sell it to the trader who exports it by goods carriers and railways to other *mandis*. A few transactions of foodgrains also take place in the village itself, where *kachcha arhtias* charge cheaper rates. Ludhiana is one of the leading districts of the State in the agricultural produce. It has eight grain markets where agricultural produce are marketed on a large scale. These markets are at Ludhiana, Jagraon, Raikot, Mullanpur , Bahadurgarh, Khanna, Samrala and Doraha. Khanna is a big market, which traders from Bombay, Delhi and other parts of the country visit every year. Over 2½ lakh quintals of ground-nut and 3 lakh quintals of raw cotton are marketed in Khanna *Mandi* every year apart from big quantities of wheat, maize and *gur*. Jagraon is another big market in the district. It is well known for maize, cotton and wheat arrivals. All these markets are well connected by road or by railways. Thousands of quintals of corn are daily marketed in these *mandis*.

Trade Centres:

Regulated and Unregulated Markets.—To save the cultivator from evils of unhealthy market practices and to ensure a fair price for his produce, the Punjab Agricultural Produce Markets Act was passed in 1939. The Act provides for the regulation of markets through market committees which represent growers, commission agents and traders, local bodies and the State Government. The market committees standardise various market practices and charges and enforce use of standard weights, thus ensuring a fair price to the cultivator. The markets at Ludhiana, Khanna, Jagraon, Raikot, Mullanpur, Samrala, Machhiwara and Doraha are notified as regulated under the Act.

The system of marketing is identical in all the regulated markets. These are managed by Market Committees. The commission agents, in many cases, advance loans to the agriculturists who bring their agricultural produce to their shops for sale. All the transactions are effected by the brokers. The sellers, however, reserve the right not to sell their produce below a particular price deemed fit by them. The commission agents charge 1.56 per cent as commission and it includes sundry charges, such as commission, weighing and thrashing charges. Prior to May, 1961, the sellers were liable for the payment of

commission, but with the passing of the Punjab Agricultural Produce Market Boards Act, 1961, the buyers are required to bear the commission charges.

The following are the main commodities for which transactions usually take place in different markets of the district :—

Ludhiana	Wheat, groundnut, *jawar*, *gur*, *sarson*, *taramira*, *mong*, *moth*, *mash*, gram and onion.
Khanna	Wheat, maize, *gur*, groundnut, American cotton and *desi* cotton.
Mullanpur	Wheat, gram, maize, groundnut, *desi* cotton and American cotton
Jagraon	Wheat, cotton, barley, gram, maize, bajra, *gur*, *jowar*, *sarson* and groundnut.
Raikot	Wheat, cotton, barley, gram, maize, *gur*, *mong*, *jawar*, bajra, *mash*, groundnut and potato.
Samrala	Wheat, barley, gram, maize, *gur*, *bajra*, *mash*,, Khandsari and groundnut.
Doraha	Wheat, gram, groundnut, *jawar*, *bajra*, and *gur*.

The Government exercises control for the regulation of the trade in the agricultural produce with the help of the market committees constituted in all regulated markets for the implementation of the provisions of the Punjab Agricultural Produce Market Boards Act, 1961.

A statement showing the total arrival of agricultural produce in respect of important markets of the district during the last five years is given in Appendix III on pages 323-25.

Fairs and Festivals.—*Melas* and festivals have a special place in Indian way of life. Certain festivals mark the change of season and generally one season ends on the day the festival falls and a new season commences. People are very much enthusiastic about celebration of festivals. Some of the festivals are marked by colourful ceremonies that have come to be associated with them. *Melas* are held at particular places every year on the same day. People from neighbouring villages participate in it and apart from the purchase of eatables they make other purchases also to meet their household requirements. Many shopkeepers instal their shops in the *melas* to cater to the varying tastes of the public. *Melas* invariably serve the purpose of periodical markets and some people go on postponing the purchases of the

necessities of life till the next *mela* is held in the vicinity. *Melas* are, in fact, miscellaneous markets, where articles of various kinds are marketed. Some are held for a single day whereas others last for even three to five days. There are no less than 31 *melas* held on different dates at different places in the district.

A list of religious fairs and festivals held in the district alongwith their descriptions is given in chapter III, on pages 167-68.

Cattle Fairs.—The district is agriculturally very much advanced. While it has some very good grain markets, it has a record number of *mwaishi mandis* (Cattle fairs), which are arranged on different dates at various places. Each such *mandi* is generally arranged for two to three days. Apart from *mandis* held on some special days, monthly *mandis* are held at Jagraon, Samrala, Ludhiana, Khanna and Khamanon. Some *mandis* are organised yearly or half-yearly on fixed dates at Dakha, Dehlon, Chhapar, Sahnewal, Mullanpur and Hatur. In all 78 such *mandis* are held every year. Besides, there are cattle *mandis* held at Kohara and Malaudh. Hundreds of cattle heads are brought and sold in these *mandis*. The live-stock include horses, camels, bullocks, cows, buffaloes, goats and sheep, etc. These are well-organised *mandis* and the owners of the best cattle/animals are also awarded prizes. These *mandis* also attract many shops which cater to tastes of people who come to purchase or sell their live stock.

Co-operation in Trade :

Co-operative Marketing.—There is a District Wholesale Co-operative Marketing and Supply Society at Ludhiana. It undertakes wholesale business of Government supplies of agricultural seeds, implements, insecticides, sugar, oil, etc. Besides there are following registered co-operative marketing and marketing-cum-processing societies in the district :—

Name of the society		Date of Registration
1. The Ludhiana Co-operative Marketing Society Ltd., Ludhiana	..	7-12-1957
2. The Sanehwal Co-operative Marketing Society Ltd., Sanehwal	..	30-9-1959
3. The Raikot Co-operative Marketing Society Ltd., Raikot	..	4-1-1957

Name of the society	Date of Registration
4. The Jagraon Co-operative Marketing-cum-Processing Society Ltd., Jagraon ..	15-12-1955
5. The Mullanpur Co-operative Marketing-cum-Processing Society Ltd., Mullanpur ..	21--5-1956
6. The Samrala Co-operative Marketing Society Ltd., Samrala ..	12-1-1957
7. The Khanna Co-operative Marketing Society Ltd., Khanna ..	26-8-1957
8. The Doraha Co-operative Marketing Society Ltd., Doraha ..	23-11-1955

Before the advent of the marketing movement in the district, the growers faced great difficulties in marketing their produce. The commission agents embarrassed the cultivators in several ways in regard to correct weight, fair rates and prompt payments. The marketing societies have given a fair deal to cultivators in all such transactions. They charge less commission from the cultivator members. A good number of godowns have been constructed by the co-operative marketing societies, both in rural and urban areas, where storage facilities are provided to the cultivator members. The number of godowns maintained by the co-operative marketing societies in the district as on June 30, 1966 was 170 (owned 33 and hired 137). These godowns help in collecting the produce of the cultivators in the villages and arrangements are made for its transportation to the nearest marketing society. The storage charges in these godowns are nominal. If any member stores his produce for week's time, there are no charges. If the storage facilities are availed of for more than a week, then a nomimal amount on account of storage at the rate of 5 paise per bag per month is charged. The facility is a great incentive to the cultivator members to store their surplus produce in the godowns and avail themselves of the best price of the stocks during the period of lean arrivals of produce in the market.

The membership of co-operative marketing societies consists of primary societies and individual members. Besides marketing of agricultural produce, these societies undertake the supply and distribution of agricultural requisites of the farmers, such as improved seeds, implements, insecticides, fertilizers and other consumer goods like sugar, kerosene oil, salt, etc.

After the organisation of marketing societies in the *mandis*, the farmers are getting fair prices of their produce. The societies do not accept lower bids and themselves purchase the produce of their members at

reasonable rates. The societies are rendering useful service to the cultivators.

The work done by the co-operative marketing societies in the district during the last five years is shown in Appendix IV on page 326.

Co-operative Consumers Stores.—Prior to the introduction of the Centrally sponsored scheme for the organisation of Co-operative Consumers Stores in big cities, primary co-operative consumers stores were organised. These primary units were not able to make any appreciable progress due to inadequate active membership, meagre share capital, lack of business knowledge and weak organisational structure. Hence a scheme was sponsored by the Government of India, under which a number of primary consumers stores with a separate wholesale store were to be opened in all towns and cities with a population of 50,000 or above.

The Ludhiana Central Co-opertive Consumer Store Ltd., Ludhiana, was registered on January 26, 1963. The aim of the store is to ensure equitable distribution of various kinds of articles to the consumers at competitive rates. At present (March 31, 1966) it is running 17 branches in various localities of Ludhiana.

The membership of the store on June 30, 1966 stood at 11,007 with a paid up share capital of 3·91 lakhs.

State Trading.—In order to exercise check on the activities of trade in regard to the purchase of foodgrains, the Punjab Foodgrains Dealers Licensing Order was enforced in the State in 1964. The traders are required to maintain up-to-date accounts of the purchases made by them and the stocks sold each day and to furnish fortnightly returns to the District Food and Supplies Controller, Ludhiana. The daily prices are watched by the Food and Supplies Department and daily market reports from all the important *mandis* are collected for this purpose indicating therein the total arrivals of the day and the market trends.

To provide the essential commodities of life at reasonable rates, the Government introduced the State Trading Scheme in the district in 1959. Further need for fair-price shops was felt in 1960, when there was scarcity of wheat flour and sugar. Then a number of fair-price shops were opened to ensure fair prices to consumers and to eliminate black marketing. The number of fair-price shops opened in urban areas of the district as on March 31, 1966 was 129. These fair-price shops are supplied with the imported wheat and wheat *atta* on fixed rates. Thus these shops are necessary to check the abnormal rise in prices and to supply wheat/wheat flour to consumers at reasonable rates and to further keep the prices in the lean months under check.

The State Trading of Foodgrains (wheat) was started in the State during 1959. The quantities of foodgrains purchased by the Food and Supplies Department under the scheme from the important markets in the district, during 1963-64 to 1965-66, are given below :

Year		Particulars	Quantity (Quintals)
1963-64	..	Wheat *Dara*	346
		Wheat Superior	—
1964-65	..	Wheat *Dara*	5,737
		Wheat Superior	2,53,495
1965-66	..	Wheat *Dara*	95,952
		Wheat Superior	31,945

(*Source* : District Food and Supplies Controller, Ludhiana)

To ensure that the cultivators get fair price of their produce, the Government has introduced the price support scheme. The prices in the market are watched to ensure that these do not fall below the prescribed limit. In the event of prices going downwards, the Government undertakes to purchase the wheat stocks at scheduled rates.

Market Intelligence.—For efficient marketing and proper co-ordination of supply and demand, authentic information about the volume of marketable surplus, prices, arrivals, stock and movements of important agricultural commodities is very essential. The buyer and the seller, both must be well-acquainted with demand and supply positions in order to strike a fair bargain. This will mean from the producer's side a regulated flow of supplies to *mandis*, and from dealer's point of view adequate arrangements for procuring adequate number of wagons at the required time.

The market news is disseminated to the public through handbills, posters, bulletins, calendars, circular letters, newspapers, magazines, correspondence, window display, etc. The co-operative marketing societies receive market information cards from allied societies. A few good market committees also send daily information cards to Sarpanches of villages served by them. There is, however, need for comparative study of prices, arrivals, stocks and demand position between different centres of trade (*mandis*).

Weights and Measures :—Till as late as the early 20th century different weights and measures were used in the district. The common scale of weight was as follows :—

37 paise *mansuri* = 1 seer *kachcha*

40 seers *kachcha* = 1 maund *kachcha*.

The *mansuri* pice was the old copper coinage of the country. The *kachcha* scale was used everywhere, and the whole of the trade in grain was carried on in it. Even in the shops of the town of Ludhiana, no other measure was used. The *kachcha* maund at Ludhiana was equal to standard 17 seers. It varied slightly through the district, being a remnant of Misl times, when every local chief adopted his own weight. At Jagraon the maund was about 4 seers (*kachcha*) less than that of Ludhiana; and one of Pakhowal something smaller still.

Weighing was generally done with a ten-seer (*kachcha*) weight, called *deserah*, which had a Government stamp on it. Almost every agriculturist had a weighing balance (*takri*) of his own. A *mat* or earthenware vessel was used in the field for finding out roughly the amount of grain, but in selling it the weight and balance were always used. Milk was bought and sold by the seer, but it was generally measured in a *gadwa* or brass vessel of known capacity.

The adoption of the measure of area had been subject of much inquiry and of a good deal of correspondence. Emperor Akbar had fixed one standard *bigha* for the whole of the empire. It measured a square of land, the length of the side of which was fixed with a specified chain (*jarib*). The chain was 20 *ghattas*, each *ghatta* being 3 *'ilahi gaz'*. The *ghatta* is, however, not mentioned in the *Ain-i-Akbari*.

The ancient measures of the country are *ghumaon*, and *kachcha bigha*. The latter is the standard of Hindustan or the cis-Sutlej country ; and the former appears to be in use all over the Punjab proper, and it has also partly spread in the Malwa. In the uplands of this district, the *ghumaon* was used in the greater part of Jagraon and in the Jangal villages, and the *bigha* in the rest of the country. In the *bet*, the *ghumaon* prevails except in a small stretch of country about Mattewara. It was not in the power of the rulers to make the people adopt a new measure ; but they could fix the standard of that measure. The scale of the *ghumaon* was as follows :—

3 *Karams* (double paces each way)	.. 1 *Marla*
87 *Marlas*	.. 1 *Kanal*
8 *Kanals*	.. 1 *Ghumaon*

But generally the *ghumaon* is said to be four *kachcha bighas.* A *kachcha* bigha is 20 *karams* each way. The British finally adopted for future use a *kachcha* bigha, 1/3 of the old pukka bigah, measured by a chain of 20 *karams* the *karam* being 57 inches, and the chain 95 feet. This average fitted into the old standard of the district.

Actually prior to 1941, there was no uniform standard of weights and measures, but this handicap was removed with the passage of Punjab Weights and Measures Act, 1941. The metric weights and measures, under the Punjab Weights and Measures Act, 1958, passed in consequence of the Standards of Weights and Measures Act, 1956 (Government of India), were introduced in the district with effect from October 1, 1958, and enforced from April 1, 1961, respectively. In the case of weights, use of old weights was allowed for a period of two years and from October 1, 1960 the use of metric weights was made compulsory. In the case of measures, a period of one year was allowed for the use of measures previously in vogue and from April 1, 1962, metric measures were made compulsory in the district. The use of metric units became obligatory from April 1, 1962.

The Inspector, Weights and Measures, verifies weights and scales, etc., in the district for trade purposes.

Storage and Warehousing.—The Co-operative Agricultural Service Societies had 391 godowns (124 owned and 267 hired) constructed under Intensive Agricultural Development Programme (I.A.D.P.) on June 30, 1966. The capacity of owned godowns is 2,000 quintals approximately each. Ordinarily in all *mandis*, the commission agents provide storing facilities for produce brought to them for sale. There are no stores at the railway stations throughout the district. There are two co-operative cold storages, viz., The Ludhiana Co-operative Cold Store Ltd, and Adarsh Co-operative Cold Store located at Ludhiana. The Ludhiana Co-operative Cold Store has a storage capacity of 14,000 quintals.

Prior to the formation of State Warehousing Corporation, the agriculturists were not provided any facilities whereby scientific storage of their produce could be ensured. Their indigenous stores, *kothas* (bins) in their houses, huts made of mud and mattings, etc., were exposed to ravages of rain and seepage water and depredations of insect pests and rodents. The Agricultural Produce (Development and Warehousing) Corporation Act, 1956, has pioneered the formation of Central Warehousing Corporation and a net-work of State Warehousing Corporations with the avowed object of providing scientific storage at low charges and arranging for cheap and quick credit facilities against the stored produce. This is intended to encourage standardisation of the produce. The Punjab State Warehousing Corporation was constituted by the Government

from January 2, 1958, under the Act. The Corporation is running warehouses in hired accommodation at Jagraon, Doraha, Ludhiana, Sahnewal, Samrala and Khanna in the district. The Corporation is providing scientific storage of agricultural produce in the warehouses and the Scheduled Banks make advances to depositors on the pledge of Warehouse Receipts according to the credit restrictions of the Reserve Bank of India. Besides, the Corporation also undertakes fumigation of stocks under the Technical Advisory Scheme after recovering the fumigation charges. At present, the rate of charges for this work is 15 paise per bag weighing up to 1 quintal and the minimum quantity chargeable for fumigation is 20 metric tonnes.

The storage charges of the warehouses have been kept as low as possible to cover the actual expenses incurred, because the scheme is designed to run on "no profit, no loss basis." The storage rates for major commodities are given below :

Serial No.	Name of commodity	Weight of Unit	Storage charges per month	Remarks
			Paise	
1	*Bajra*, Wheat, Rice, Gram, Barley, Maize, Millet and other such foodgrains including pulses, etc.	Bags up to 95 kgs.	23	A rebate of 10 per cent will be allowed to Co-operative Societies on total bill of storage rounded off to nearest paise
		Bags up to 100 kgs.	24	
2	Paddy in bags ..	Up to 75 kgs.	18	
		Above 75 kgs. to 1 quintal	22	
3	Groundnut Kernel	Kernel up to 100 kgs.	24	
4	Mustard and *Taramira*, etc.	Up to 85 kgs.	20	
		Above 85 kgs. to 1 quintal	23	
5	Sugar ..	Up to 100 kgs.	24	
6	*Khandsari*	Up to 60 kgs.	14	
		Above 60 kgs. to 100 kgs.	23	
7	*Gur*	Up to 40 kgs. in bags	18	
	(i) From 1st November to 31st July	Up to 40 kgs. to 75 kgs.	27	
	(ii) From 1st June to 31st Oct.	Up to 40 kgs in bags	24	
		Above 40 kg. to 75 kgs.	36	
8	Shakkar	Weighing up to 100 kgs.	24	
9	Cotton Lint (fully pressed) bales weighing	Up to 4½ mds. (200 kgs.)	65	
10	Cotton Docras Weighing	Up to 130 kgs.	45	
		For every additional 35 kgs. or part there of	15	
11	Cotton Loose (Bulk) with or without seeds weighing	Up to 100 kgs.	37	

APPENDIX I

Co-operative Agricultural Credit Societies

Period	Number of co-operative societies at the end of the year	Membership — Individuals	Share capital paid up (Rs. in lakhs)	Loans advanced during the year (Rs. in lakhs)	Deposits (Rs. in lakhs)
1	2	3	4	5	6
1956-57 ..	678	49,280	22·20	43·75	26·73
1957-58 ..	726	56,614	27·10	59·48	30·66
1958-59 ..	783	66,366	31·93	78·82	35·20
1959-60 ..	869	85,519	37·57	109·00	41·96
1960-61 ..	919	99,197	43·57	126·25	55·37
1961-62 ..	933	104,563	51·13	174·37	55·37
1962-63 ..	937	110,063	59·37	181·00	76·96
1963-64 ..	944	115,683	68·09	224·95	88·25
1964-65 ..	1,016	135,006	84·60	279·19	92·06
1965-66 ..	973	142,698	96·41	160·51	137·39

(*Source* : The Assistant Registrar, Co-operative Societies, Package Programme, Ludhiana)

APPENDIX II

Co-operative Non-agricultural Credit Societies

Period	No. of co-operative societies at the end of the year	Membership — Individuals	Share capital paid up (Rs. in lakhs)	Loans advanced during the year (Rs. in lakhs)	Deposits (Rs. in lakhs)
1	2	3	4	5	6
1956-57 ..	94	5,619	5·75	0·03	0·63
1957-58 ..	92	5,689	6·80	0·05	0·71
1958-59 ..	93	5,902	7·89	0·06	1·82
1959-60 ..	110	6,809	10·13	0·02	2·47
1960-61 ..	110	6,471	11·57	1·45	1·94
1961-62 ..	68	987	2·66	0·02	—
1962-63 ..	79	1,289	3·10	0·41	—
1963-64 ..	90	1,590	3·91	0·58	—
1964-65 ..	192	5,198	3·23	5·35	1·80
1965-66 ..	197	6,265	3·25	5·00	1·86

(*Source* : The Assistant Registrar, Co-operative Societies, Package Programme, Ludhiana)

APPENDIX III

APPENDIX III

Total Arrival of Agricultural Produce (in quintals) in Various Market Committees of Ludhiana

Name of the Market Committee	*Name of the Agricultural*							
	Wheat	Gram	Barley	Maize	*Bajra*	*Jowar*	*Moong*	*Mash*
1	2	3	4	5	6	7	8	9
Ludhiana								
1963-64	201,628	43,163	849	32,419	1,907	4,372	3,455	3,837
1964-65	1,580,296	32,217	846	22,038	1,384	3,591	5,160	3,733
1965-66	226,484	56,368	1,782	78,879	1,979	3,982	3,979	4,050
Jagraon								
1963-64	460,288	42,823	655	101,755	1,481	3,737	1,344	1,289
1964-65	349,044	29,245	751	28,346	398	1,313	660	941
1965-66	448,253	24,937	3,725	147,764	1,201	1,808	671	2,378
Samrala								
1963-64	23,262	2,902	29	5,588	—	—	—	529
1964-65	25,603	802	114	6,273	—	—	—	498
1965-66	37,272	2,968	898	20,464	—	—	--	300
Khanna								
1963-64	323,279	7,811	268	42,763	307	1,554	—	922
1964-65	286,888	6,966	1,236	41,414	—	1,530	—	488
1965-66	308,926	14,223	10,195	115,058	—	775	—	459
Mullanpur								
1963-64	64,869	7,674	183	23,002	603	924	134	223
1964-65	50,629	6,982	214	7,279	491	253	250	378
1965-66	66,237	6,078	792	39,215	876	779	408	790
Raikot								
1963-64	41,346	3,098	100	5,724	92	690	307	138
1964-65	37,702	2,339	86	3,117	50	685	386	177
1965-66	73,699	2,983	568	29,813	72	887	352	322
Doraha								
1963-64	47,487	2,069	94	18,463	—	—	—	—
1964-65	40,584	2,184	138	8,245	—	—	—	—
1965-66	68,042	3,748	821	45,645	—	--	—	—
Machhiwara								
1964-65	3,016	342	42	4,796	127	25	8	124
1965-66	23,800	2,045	514	13,154	289	462	27	125

District during the Years 1963-64 to 1965-66

Commodities

Moth	*Gur*	*Shakkar*	*Khandsari*	Cotton *American*	Cotton *Desi*	Onion	Potato	Ground nut
10	11	12	13	14	15	16	17	18
5,703	16,348	973	8,998	—	2,047	27,166	62,159	77,148
6132	19,656	757	11,544	—	—	33,291	59,574	101,306
4,052	26,739	530	11,109	—	—	27,608	69,924	132,454
2,645	36,917	—	—	36,454	131,701	—	—	21,647
2,009	30,859	—	—	19,655	63,169	—	—	29,938
522	29,999	—	—	31,982	103,079	—	—	53,831
—	7,866	—	2,638	—	3,283	—	—	55,566
—	11,720	—	4,030	—	3,260	—	—	51,686
—	19,826	—	8,728	—	1,702	—	—	60,143
—	43,454	3,559	26,231	—	8,633	1,570	6,123	258,527
—	65,870	2825	32,334	—	5,320	2,331	4,932	224,153
—	87,586	3,190	62,270	—	3,878	2,565	7,684	364,124
84	1,853	38	—	2,810	23,392	61	74	23,034
404	3,862	235	—	1,245	9,219	36	53	42,800
475	3,560	135	—	1,581	17,324	54	67	81,367
892	5,819	—	—	1,307	11,486	218	2,535	—
977	8,958	—	—	1,730	4,160	1,017	2,485	103
856	10,375	—	—	2,206	10,695	1,545	3,383	324
—	1,185	205	—	5,883	4,475	—	—	70,518
—	1,333	160	—	2,830	2,557	—	—	74,033
—	1,922	211	—	3,791	3,768	—	—	101,150
—	1,204	208	226	682	703	—	—	64,787
—	1,911	324	697	1,716	652	—	1,634	88,301

(*Source* : Secretaries, Market Committees)

APPENDIX IV

Work done by Co-operative Marketing Societies

Co-operative year ending June	No. of societies	*Membership*			Paid up share capital (Rs. in lakhs)	Working capital (Rs. in lakhs)	Value of goods marketed (Rs. in lakhs)
		Individual	Societies	Total			
1	2	3	4	5	6	7	8
1962 ..	7	1,907	391	2,298	6·27	12·98	21·99
1963 ..	7	2,276	621	2,897	6·34	16·49	23·66
1964 ..	7	2,764	811	3,575	6·42	18·22	34·35
1965 ..	8	3,311	903	4,214	7·94	32·43	208·23
1966 ..	8	4,130	948	5,078	10·46	44·01	166·11

(*Source* : Assistant Registrar, Co-operative Societies, Package Programme, Ludhiana.)

सत्यमेव जयते

CHAPTER VII

COMMUNICATIONS

(a) Old Time Trade Routes and Highways and Modes of Conveyance. Roads are the veins and arteries of a country through which every improvement circulates. Indian history abounds in references to road construction activity undertaken in the past and the road policy adopted by different rulers from time to time. The pace of road construction was accelerated with the advent of the British in the Cis-Satluj region early in the 19th century. Though roads were built principally from the administrative and strategic standpoints, yet these promoted inter-communication among the different areas and helped to reduce the isolation between towns and villages.

(b) Road Transport.

The total metalled road length in the district, maintined by the Public Works Department, was 469.10 kms. on March 31, 1966 as against 268 kms. in 1947 at the time of the partition of the Punjab. To cope with the increasing volume of traffic, the Grand Trunk Road, Ludhiana-Chandigarh Road and Ludhiana-Ferozepore Road are being widened.

(i) **Classification of Roads.**—The following table shows the category-wise classification of roads in the district:—

Road Length in Ludhiana District as on March 31, 1966

	Metalled Roads (kms.)	Unmetalled Roads (kms.)	Total Roads (kms.)
A. Roads maintained by Public Works Department—			
1. National Highway ..	68 ·21	—	68 ·21
2. State Highways ..	124 ·97	—	124 ·97
3. District Major Roads ..	14 ·08	—	14 ·08
4. District Minor Roads ..	261 ·84	28 ·07	289 ·91
Total ..	469 ·10	28 ·07	497 ·17
B. Roads maintained by the Zila Parishad, Ludhiana—			
1. Other District Roads ..	49 ·44	36 ·80	86 ·24
2. Village Roads ..	55 ·86	188 ·79	244 ·65
Total ..	105 ·30	225 ·59	330 ·89

Out of the total road length of 497·17 kms. maintained by the Public Works Department in the district as on March 31, 1966, the metalled measured 469·10 kms. and the unmetalled 28.07 kms. The National Highway, State Highways, District Major Roads and District Minor Roads are maintained by the State Public Works Department. The National Highway is maintained out of the Central Government funds while the rest are maintained out of the State funds. Other District Roads (Second Class Roads) and Village Roads (Third Class Roads) are maintained by the Zila Parishad, Ludhiana, out of its own funds. Besides, there are some roads within the limits of different municipalities which are maintained by the Municipal Committees concerned. (See Appendix at pages 340—43).

A detailed description of each category is given below:

National Highways.—National Highways are defined as main highways running through the length and breadth of the country, connected with other highways of various States. They also include the highways required for strategic movements of troops and defence equipment. National Highways are maintained by the State Public Works Department out of Central Government funds.[1] These roads are generally fully bridged and metalled, and in recent years most of them have been black-topped.

67.77 kms. of Grand Trunk Road, National Highway No. 1, lie in the district. This length includes a bye-pass, 8.60 kms. long, which was constructed near Ludhiana town in 1962 so as to avoid the congested area of the town through which the G.T. Road otherwise passes. From Delhi side the G.T. Road enters the district at km. 257.70 and leaves it at km. 316.80.

The Grand Trunk Road in the Punjab is a continuation of the Grand Trunk Road, which, starting from Calcutta, runs through Northern India to Delhi. Thence, passing through Karnal and Ambala, it reaches Ludhiana and thereafter extends to Amritsar and the border with West Pakistan. The section from Karnal to Ludhiana was opened in 1852, and that from Phillaur to the Beas was opened in 1860-61. It runs alongside the Northern Railway.

State Highways.—These are defined as all other main trunk or arterial roads of a State connected with the National Highways, district headquarters and important towns within the State and serving as the main arteries of traffic to and from the district roads. These roads are maintained by the State Government and are generally bridged and metalled. They are motorable throughout the year, except that whenever they come across causeways or

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[1]The Government of India assumed financial responsibility for the construction and maintenance of a system of national highways with effect from April 1, 1947.

submersible bridges they are subject to interruptions in traffic for short periods, especially during the rainy season. State Highways are invariably connected with the National Highways.

The State Highways passing through the district measure 124.24 kms. in all: Ludhiana-Samrala section (32.16 kms) and Samrala-Morinda section (21.84 kms.) of the Chandigarh Ludhiana Road ; Ludhiana-Ferozepore Road (44.80 kms,); and Ludhiana-Malerkotla Road (25.44 kms. besides its portion of 2.40 kms. maintained by the Municipal Committee, Ludhiana).

Major District Roads.—These are roughly of the same specifications as the State Highways connecting important marketing centres with the railways, the State Highways and the National Highways.

Under this head comes the Ludhiana-Machhiwara section (14kms.) of the Ludhiana-Rahon Road.

Minor District Roads.—These serve as important arteries of communication between different parts of the district. The more important among them are Samrala-Bahlolpur Road, Khanna-Samrala-Machhiwara Road, Sahnewal-Kohara Road, Jagraon-Raikot Road, Dakha-Halwara-Raikot Road, Khanna-Bhari-Kheri Road, Sidhwan-Mehatpur Road and Sahnewal-Dehlon-Raipur Road.

The State Highways and the Major and Minor District Roads are constructed and maintained by the State Public Works Department.

Village Roads.—These are generally approach or link roads from the main roads to the villages and have generally an unmetalled surface. Construction of link roads has been going on in rural areas quite vigorously since this project was launched in the State on January 21, 1968. The villagers, with whose free labour this project is being executed, are generally giving due priority to this voluntary work. In some cases, the villagers raise money to engage labourers for expediting the earth-work in their respective areas. The P.W.D. simultaneously carries out its job of metalling the roads.

The break through in agriculture has made the villagers acutely conscious of the significance of link roads. The green revolution has also brought about a radical change in their stoic conception of life and has created new and varied urges in them.

The village roads are maintained by the Zila Parishad.

The district made good progress in construction of roads during the different plan periods as is borne out by the total road length in the district at the end of the different plan periods, shown below:

Plan	Year	Road Length		
		Metalled (Kms.)	Un-metalled (Kms.)	Total (Kms.)
.. ..	1950—55	293	331	624
First Five-Year Plan ..	1955-56	314	330	644
Second Five-Year Plan ..	1960-61	422	320	742
Third Five-Year Plan ..	1965-66 (as on March 31, 1966)	569	218	787

(*Source* : Chief Engineer, Punjab, P.W.D., Buildings and Roads Branch)

(ii) **Vehicles and Conveyances.**—The old time means of conveyance comprised *shigrams*, *ekkas* and *majholis*, used by travellers, and bullock carts used for carrying agricultural produce. Camels were used for carrying grain from *Jangal* villages, where the roads were particularly sandy, and only a small load could be brought on a cart. Donkeys were used for bringing grain and bricks, etc., from short distances into Ludhiana.

Besides the ordinary farm carts used for agriculture, there were other carts working for hire, i.e., those going to Ludhiana and beyond it with loads of grain, etc. (*Dasawarwala*). The carts used in carrying trade were a variation of the ordinary cart.

Though motor vehicles are becoming increasingly popular, yet the bullock carts still hold the sway in the countryside, both for conveyance and carriage of goods. They are eminently suited to the rugged countryside where the sophisticated modern vehicles dare not tread. An improvement introduced in their structure in the recent past has been the use of pneumatic tyres in place of the traditional wooden wheels.

With the improvement and extension of roads and the indigenous cycle industry, push-cycles are being used as extensively in villages as in towns.

A remarkable feature of the post-Independence period has been a rapid decline in the use of tongas and *ekkas* drawn by horses. This is primarily due to the emergence of the cycle-rickshaws, which are cheaper and easier to maintain. The horse-carts, however, still continue to be used on the roads in the countryside, though as conveyance in towns very few of them are to be seen.

The increase in the use of motor vehicles is also a marked feature of the post-Independence period as shown by the number of different types of motor vehicles on road in the district during the period 1961-66, as given in Appendix II at page 344.

Automobiles.—Motor cycles and scooters are becoming quite popular with the well-to-do section of the people. Auto-rickshaws provide another means of quick transport in cities. These are easily available and more convenient than the buses, and are also cheaper than the taxies which are hired by richer class of people.

Cycles.—Introduced in the world in 1867, the cycles appeared in the Indian cities in the beginning of the 20th century. The bicycle is decidedly a cheaper means of individual transport. For short distances within a city, it is a very handy conveyance. Besides carrying a rider, it has given opportunity to Indian dairymen and cultivators to bring milk and other minor products to the cities and adjoining towns. A large number of students, teachers and workers have found in bicycles a good and handy transport. It has made Indian workers more mobile. It is cheap, flexible and convenient. Sometimes hawkers sell their wares on their bicycles.

Cycle Rickshaws.—Men-driven two wheeled rickshaws were formerly used for carrying passengers at hill stations. In the Punjab, the cycle rickshaw is an innovation introduced after 1947. Its popularity was largely due to the fact that most of the indigent displaced persons were eager to find quick means of employment and the cycle rickshaws required small capital investment or could be procured on hire-purchase basis or on payment of a specified daily rent for plying it. The three-wheeled rickshaw has now become very common in towns and cities. These have practically ousted tongas and *ekkas* from the field. The well-to-do rickshaw-pullers purchase their own rickshaws while others obtain them on hire.

The Punjab Government have formed bye-laws for the well being of the rickshaw-pullers. Only the physically fit persons between the ages of 18 and 45 are allowed to ply the vehicles. Only two persons are allowed to be carried in a rickshaw.

Horse carrriages.—As a means of conveyance, horse carriages, i.e., tongas and *ekkas*, are found useful in carrying passengers from one part of the city to another. Now-a-days, there is a keen competition between the horse-drawn carriages on the one hand and the cycle rickshaws, motor rickshaws and motor buses on the other. But the horse carriages cannot be ousted completely.

(iii) **Public Transport.**—The introduction of passenger road transport is an important landmark in the history of transport service in the State. Its

extension in the post-Independence period has been particularly remarkable. Although major important routes have been nationalised, yet a good many routes are operated by private transport companies. Road transport has interconnected rural and urban areas. With the development of industries and agriculture, the passenger traffic has so much increased that it would have been impossible for the railways to cope with it singly. Moreover, each and every important and unimportant urban and rural locality cannot be possibly linked through railways. Therefore, the development and extension of road transport was both natural and essential.

State-owned Services.—Ludhiana lies on the routes of most of the State-owned transport services. The Punjab Roadways, Jullundur (Depot), has a Sub-Depot at Ludhiana which operates its services on 23 routes as detailed in Appendix III on pages 344-45.

Private Bus Services.—These render great service in linking together different parts of the district. The private bus services operating in the district are:—

1. The Akal Transport Co., Pvt. Ltd., Ludhiana
2. The Ludhiana Transport Co., Pvt. Ltd. Ludhiana
3. The Nankana Sahib Transport Co., Pvt. Ltd., Ludhiana
4. The National Transport and General Co., Pvt. Ltd., Ludhiana
5. The Dasmesh Transport Co., Pvt. Ltd., Ludhiana
6. The Nirbhai Roadways, Pvt. Ltd., Ludhiana
7. The Sheikhupura Transport Co., Pvt., Ltd., Ludhiana
8. The Satluj Transport Co., Pvt. Ltd., Jullundur

The detailed particulars regarding the routes operated by the above mentioned transport companies are given in Appendix IV at pages 346—48.

(c) **The Railways.**

The Railways are a significant and potential means of transport for men and material over long distances. They have greatly contributed to the industrial and commerical development of the country. Their introduction has converted barren and unpopulated land into flourishing fields and densely populated areas. They have also helped in the social development of the country. They carry raw materials and finished products to the port towns to be exported to other countries, and transport imported articles to the numerous distributing centres inside the country. The railways promote international trade.

Ludhiana is an important railway junction on the Northern Railway, being connected with Jullundur and Amritsar on the north and north-west, Ferozepore on the west, Dhuri, Jakhal and Hissar on the south, and Sirhind and Ambala cantt. and thence with Delhi on the south-east.

The Amritsar-Ambala line is a broad-gauge double line. It enters the district at Phillaur by an iron bridge across the Satluj and runs through it for about 58 kms. in a south-easternly direction, serving Ludhiana and Samrala tahsils. Loudhowal, Ludhiana, Dhandari Kalan, Sahnewal, Doraha, Jaspalon, Chawapail and Khanna railway stations lie on this route. This is the oldest line, having been constructed in 1870. The Ludhiana-Ferozepore line is also broad-gauge and runs westward from Ludhiana, passing through the western half of Ludhiana tahsil and the middle of Jagraon tahsil. Model Gram[2], Baddowal, Bhanohad Punjab, Mullanpur, Chauki Man, Jagraon and Nanaksar are the railway stations located on it. The Ludhiana-Dhuri-Jakhal-Hissar line is broad-gauge and runs through Ludhiana tahsil in the southernly direction connecting Gil, Jassowal, Qila Raipur, Gungrana and Ahmadgarh.

The tahsil-wise list of railway stations in Ludhiana district is as under :

Tahsil	Railway Station
Tahsil Ludhiana	.. Ludhiana
	Model Gram
	Baddowal
	Bhanohad Punjab
	Mullanpur
	Gil
	Jassowal
	Qila Raipur
	Gungrana
	Ahmadgarh
	Dhandari Kalan

2. Situated at a distance of 4 kms. from Ludhiana, the Model Gram Railway Station was formally opened on November 14, 1962. It serves new colonies on the south-western periphery of the Ludhiana city

Tahsil	Railway Station
	Sahnewal
	Doraha
	Loudhowal
Tahsil Samrala	.. Jaspalon Chawapail Khanna
Tahsil Jagraon	.. Chauki Man
	Jagraon
	Nanaksar

Appendices V and VI (pages 348—49) show the monthly average railway passenger and goods traffic and earning during 1965-66.

Rail Road Competition.—With the growth of railways, a mistaken view was formed that roads were unnecessary and unprofitable. So the road development was seriously retarded during the latter half of the 19th century. But the advent of motor transport in the beginning of the 20th century led to a better appreciation of the value of through highways.

The Mitchell-Krikness Committee, appointed by Government of India, recorded in 1933 huge annual loss of railway revenue owing to competition from roads. During the World War II (1939—45) there was practically no rail-road competition as considerable number of motor vehicles were requisitioned by the Government for military purposes and the railway catered for traffic far in excess of their capacity. After the cessation of War, the fear of rail-road competition was aroused again, as was witnessed by the promulgation of rigid code of principles and practices for regulating plying of motor vehicles. The measures aimed at protecting railway interests as a result of the financial stake of the Government.

After the Independence, Government thought of nationalising road transport. Later, it reached fifty fifty agreement with private transporters. Efforts are also afoot to achieve best possible co-ordination between rail and road traffic.

A sample study[3] of the flow of traffic has revealed that there is a good deal of traffic moving by road in the State. Though the actual ratio of the rail and road traffic is not known, preference is clearly for road. This is more

3. *Techno-Economic Survey of Punjab* (National Council of Applied Economic Research, New Delhi), 1962, P. 71.

pronounced in the case of shorter haulages. The reasons for diversion to road traffic seem to be the lower freight rates, proper supervision, absence of irksome formalities and door-to-door service. Moreover the last decade and a half have seen a lot of road expansion, whereas there has been little extension of railways.

For transport of heavy machinery, bulky articles and also for long distance haulages (beyond 300 miles), there is a pronounced preference for railways.

(d) Waterways, Ferries and Bridges

Waterways.—The two types of inland water transport are the river transport and the canal transport. In the past, the Satluj was utilized for the purpose. The Sirhind Canal was also useful in bringing timber from the Himalayan region. However, none of these is now utilized for large scale transport purposes.

Ferries.—Satluj is the only river which flows along the northern boundary of the district. About 32 kms. from Ropar, it enters tahsil Samrala and then flows for about 96 kms. forming boundary between the Ludhiana and Jullundur districts.

In winter, the Satluj has very little water. During the rainy season, however, it is notorious for floods though the construction of canals and the Bhakra Dam have considerably reduced the volume of water in the river.

The ferries on the Satluj, falling in Ludhiana district, are as under:

Name of ferry	Tahsil in which situated
1. Sherpur	.. Tahsil Samrala
2. Jodhwal	.. Tahsil Samrala
3. Khanpur	.. Tahsil Samrala
4. Julah Mazra	.. Tahsil Samrala
5. Mattewara	.. Tahsil Ludhiana
6. Chounta	.. Tahsil Ludhiana
7. Lasara	.. Tahsil Ludhiana (Sub-tahsil Payal)
8. Kariana	.. Tahsil Ludhiana

Name of ferry	Tahsil in which situated
9. Khera	.. Tahsil Ludhiana
10. Bhundri	.. Tahsil Jagraon
11. Tihara	.. Tahsil Jagraon

Out of the above, only five ferries, viz., Sherpur, Jodhwal, Khanpur, Bhundri and Tihara[4] are operating. The boats maintained at these ferries are private ones while the management is of the State through the Panchayat Samities concerned.

Bridges.—The particulars regarding the bridges in the district are as under:

Bridges in Ludhiana District as on March 31, 1966

Serial No.	Name of Road	Mile No.	No. of Spans	Length of each span		Distance between wheel guards	
				Feet	Inches	Feet	Inches
1	G. T. Road	178 (285 km.)	3	34	0	24	0
2	,, ,,	178 (285 km.)	5	46	0	22	0
3	,, ,,	192 (307.2 km.)	7	30	6	24	4
4	G. T. Road Bye-pass	188 (301 km.)	1	46	6	22	0
5	,, ,, ,,	190 (304 km.)	2	25	0	22	0
6	,, ,, ,,	190 (304 km.)	5	25	0	22	0
7	,, ,, ,,	197 (315 km.)	1	46	6	22	0
8	Ludhiana-Ferozepore Road	Railways Over Bridge					
9	,, ,, ,,	3 (5 km.)	5	23	9	22	0
10	,, ,, ,,	19 (30 km.)	Drainage Bridge				
11	Ludhiana-Chandigarh Road	16 (25 km.)	5	45	0	22	0

(*Source*: Executive Engineer, Ludhiana Provincial Division, Ludhiana)

(e) Travel and Tourist Facilities

Facilities for the stay and comfort of travellers, tourists and visitors in general are available at important places in the district in the form of serais, *dharamshalas* and hotels. Besides, there are rest houses and dak bungalows for the use of Government officers /officials.

4. Tihara ferry is leased out by the Panchayat Samitis concerned in the Ludhiana and Jullundur districts turn by turn every year

Dak Bungalows and Rest Houses.—These are maintained by the different departments, etc., for the use of their employees during their visits to these places A list of rest houses, etc., in the district is given at Appendix VII at pages 350—351.

(f) Posts, Telegraphs and Telephones.—

Posts.—In the eighties of the 19th century, the mail to Ferozepore was sent by horse dak, and there was also a Government bullock train. Besides, there was a horse dak for passengers. There was a district dak carried by runners between Khanna and Machhiwara, Ludhiana and Dehlon, Jagraon and Raikot. Towards Lahore and Ambala, the post was sent by mail train.

In the beginning of the present century, the post offices in the district were under the Superintendent of Post Offices, Ludhiana Division, Ludhiana. Mails were carried by Mail Cart from Ludhiana to Jagraon, by *shigram* from Ludhiana to Samrala, and there was a district *ekka* dak from Raikot to Wataha. On the remaining lines, Imperial or District, the mails were carried by runners.

On September 30,1911, under the Head Post Office at the district headquarters at Ludhiana, there were 11 Sub-Post Offices at Dehlon, Jagraon, Kaonke, Khanna, Ludhiana City, Ludhiana Iqbalganj, Raikot, Samrala and Sahnewal, with 82 branch post offices attached to these at different places in the district.

Fifty-five years thereafter, i.e., on October, 31, 1966, there were 1 Head Post Office (H.O.), 60 Sub-Offices (S.O.), 1 Extra Departmental Sub-Office (E.D.S.O.) and 254 Extra Departmental Branch Offices (E.D.B.O.), as detailed in Appendix VIII on pages 352—61. These include 26 Town Sub-Offices (T.S.O.) and 24 Combined (Post and Telegraph) Offices (C.O.). Of the 254 Extra Departmental Branch Offices, 250 are controlled by the Senior Superintendent of Post Offices, Ludhiana Division, Ludhiana, while the remaining 4, viz., at Chari, Jatana Uncha, Khamanon Kalan and Sanghol, under the Sub-Office, Morinda (District Ropar), are under the administrative control of the Superintendent of Post Offices, Chandigarh Division, Chandigarh. Since 1951, the Ludhiana Head Post Office has been raised to the status of Ist Class Post Office.

On the main railway line, i.e., Mughal Serai-Amritsar Section, the Ludhiana Postal Division starts from Loudhowal railway station and ends at Khanna railway station ; on the Ludhiana-Hissar Section, it starts from Gil railway station and ends at Qila Raipur railway station ; and on the Ferozepore Cantt.—Ludhiana Section, it goes up to Nanaksar railway station

The Post Offices on the Ludhiana-Samrala, Ludhiana-Machhiwara, Ludhiana-Malaudh, Khanna-Jarg, Khanna-Payal, and Ludhiana-Raikot routes are in the Ludhiana Postal Division.

The mails to Gil S.O., Dehlon S.O., Malaudh S.O., Pohir, B.O., Jamalpur Awana B.O., Mundian Kalan B.O., Jartauli B.O., Samrala S.O., Machhiwara S.O., Pyal S.O., Ikolahi B.O. Isru B. O., Jarg E. D. S. O., Mullanpur Mandi S. O., Gurusar Sadhar S. O., Halwara S. O., Raikot S. O., Bassian S. O., Kamalpur B. O., Roomi B. O. and Sidhwan Bet S. O. are coveyed by mail motor. The mails to other post offices falling in the Ludhiana Postal Division are conveyed either by the Railway Mail Service or through runners.

To cope with the growth of mail delivery, the mails are carried by buses between the following places :—

Ludhiana to Raikot

Ludhiana to Machhiwara

Ludhiana to Malaudh

Jagraon to Sidhwan Bet

Jagraon to Raikot

The mails at the Branch Post Offices are delivered either by Branch Postmasters themselves, through village postmen or by Extra Departmental Delivery Agents. In Sub-Post Offices, the delivery of mails is effected by postmen.

There is not a single no-dak village in the district. In October, 1966, 62 per cent of the villages in the district were receiving mails daily, 34 per cent tri-weekly and 4 per cent bi-weekly. The mails are delivered thrice a day at Ludhiana[5], twice a day at Doraha and Khanna, and once a day at the remaining Sub-Post Offices and Branch Post Offices in the district.

Telegraphs.—In the eighties of the 19th century, there was a Government Telegraph Office at Ludhiana, and Railway Telegraph offices along the railway line at each station. In 1904, there were combined post and telegraph offices at Jagraon, Ludhiana and Khanna and railway telegraph offices along the North-Western Railway (now known as Northern Railway) and the Ludhiana-Dhuri- Jakhal Railway. There were also telegraph lines along the Main Railway Line and both the Abohar and Bhatinda Branches of the Sirhind Canal, under the Canal Department.

In 1966, telegraph facilities were available in as many as 24 post offices in the district as detailed below :

Combined Post and Telegraph Offices

1. Baddowal
2. Bassian

5. The Ludhiana city is divided into six delivery zones : (i) Ludhiana, (ii) Model Town (iii) Miller Ganj, (iv) Salem Tabri, (v) Agricultural University, and (vi) Guru Nanak Engineering College

3. Civil Lines, Ludhiana
4. Dehlon
5. Doraha
6. Gujarwal
7. Halwara
8. Ikbalganj, Ludhiana
9. Industrial Estate, Ludhiana
10. Khanna
11. Qila Raipur
12. Ludhiana City
13. Ludhiana Kutchehry
14. Machhiwara
15. Millerganj, Ludhiana
16. Model Town, Ludhiana
17. Mullanpur Mandi
18. Pakhowal
19. Payal
20. Punjab Agricultural University, Ludhiana
21. Raikot
22. Sahnewal
23. Samrala
24. Jagraon

From November 20, 1968, another Combined Posts and Telegraph Office was established at Sidhwan Khurd.

सत्यमेव जयते

Telephones.—Towards the close of 1966, there existed telephone exchanges at Doraha, Jagraon, Khanna, Ludhiana, Machhiwara, Mullanpur, Samrala and Sahnewal in the district. Of these, the first exchange was established at Ludhiana in 1914. Besides, there are trunk and long distance public call offices at Dehlon, Halwara, Qila Raipur, Payal and Raikot. For detailed particulars on the subject, refer to Appendix IX at page 362.

Ludhiana is connected directly with Amritsar, Jullundur, Patiala, Jagraon, Chandigarh, Bhatinda, Ambala, Khanna, Delhi, Sirhind, Simla, Moga, Phagwara, Muzaffar Nagar, Goraya, Ferozepore, Barnala, Malerkotla, Mandi Gobindgarh, Ahmadgarh and Dhuri.

(g) Radio and Wireless Stations.

There is a police wireless station at Ludhiana for receiving and transmitting official messages. It functions round the clock. It is provided with a mobile wireless set fitted within a pick-up van for anti-dacoity and other emergencies.

APPENDIX I

(Vide pages 327—330)

Length of Roads in Ludhiana District as on March 31, 1966

A. Roads Maintained by Public Works Department

	Metalled Roads (Kms.)	Un-metalled Roads (Kms.)	Total Roads (Kms.)
National Highway			
1 Grand Trunk Road (from Delhi to Amritsar and onward to border with Pakistan)			
National Highway No. I ..	59.55	—	59.55
2 Grand Trunk Road Bye-pass ..	8.66	—	8.66
Total ..	68.21	—	68.21
State Highways			
1. Chandigarh-Ludhiana Road—			
(i) Samrala-Morinda section ..	21.97	—	21.97
(ii) Ludhiana-Samrala section ..	32.35	—	32.35
	54.32	—	54.32
2. Ludhiana-Ferozepore Road ..	45.06	—	45.06
3 Ludhiana-Malerkotla Road ..	25.59	—	25.59
	70.65	—	70.65
Total ..	124.97	—	124.97
District Major Roads			
1. Ludhiana-Rahon Road— (i) Ludhiana-Machhiwara section ..	14.08	—	14.08
Total ..	14.08	—	14.08
District Minor Roads			
1. Payal-Rara-Dehlon Road—			
(i) Payal-Ghurani section ..	5.72	—	5.72
(ii) Ghurani-Khatra section ..	6.47	—	6.47
(iii) Khatra Bridge-Jagerah Bridge ..	9.17	—	9.17
2. Samrala-Bahlolpur Road including Jarh Sahib (Todarpur-Sirhind Canal Bridge) ..	5.95	—	5.95
3 Khanna-Samrala-Machhiwara Road ..	23.51	—	23.51

सत्यमेव जयते

		Metalled Roads (Kms.)	Un-metalled Roads (Kms.)	Total Roads (Kms.)
4.	Sahnewal-Kohara Road ..	4.68	—	4.68
5.	Jagraon-Raikot Road ..	21.70	—	21.70
6.	Dakha-Halwara-Raikot Road ..	22.84	—	22.84
7.	Jagraon-Sidhwan Road ..	13.13	—	13.13
8.	Kohara-Machhiwara Road ..	18.99	—	18.99
9.	Khanna-Malerkotla Road ..	19.58	—	19.58
10.	Choukiman-Sawaddi-Bhundri Road ..	9.65	4.98	14.63
11.	Machhiwara-Rahon Road ..	9.46	—	9.46
12.	District Court Road ..	1.00	—	1.00
13.	Link Road to Industrial Area 'A', Ludhiana ..	1·44	—	1.44
14.	Link Road to Jagraon Over Bridge, Ludhiana ..	0.79	—	0.79
15.	Inner Ring Road Round Ludhiana ..	4.60	—	4.60
16.	Khanna-Bhari-Kheri Road ..	12.87	—	12.87
17.	Halwara-Pakhowal Road ..	6.18	—	6.18
18.	Samrala-Chawa Road ..	7.24	3.47	11.71
19.	Chawa-Payal-Dhamot Road ..	15.12	—	15.12
20.	Sidhwan-Mehatpur Road ..	2.41	1.32	3.73
21.	Link Road from Jagraon-Raikot Road to village Jhorran	5.56	—	5.56
22.	Sahnewal-Dehlon-Raipur Road—			
	(i) Sahnewal-Dehlon section ..	14.66	1.80	16.46
	(ii) Raipur-Gujarwal section ..	1.75	—	1.75
	(iii) Raipur-Gujarwal section ..	2.90	5.32	8.22
	(iv) Gujarwal-Pakhowal section ..	—	7.13	7.13
23.	Approach Road to Grand Trunk Road ..	1.82	—	1.82
24.	Approach Road to Ludhiana-Ferozepore Road ..	6.07	4.05	10.12
25.	Approach Road to Ludhiana-Ferozepore Road ..	5.28	—	5.28
26.	Approach Road to Payal-Rara-Dehlon Road ..	0.50	—	0.50
27.	Approach Road to Dakha-Halwara Road ..	0.80	—	0.80
	Total ..	261.84	28.07	289.91

सत्यमेव जयते

B. Roads Maintained by Zila Parishad, Ludhiana

		Metalled Roads (Kms.)	Un-metalled Roads (Kms.)	Total Roads (Kms.)
Other District Roads				
1. Ludhiana-Raikot Road	..	12.99	11.20	24.19
2. Akhara-Hatur Road	..	11.20	8.00	19.20
3. Sidhwan Bet-Tihara Road		6.40	3.20	9.60
4. Ahmadgarh Railway Station Approach Road	..	1.47	—	1.47
5. Jogi Mazra-Malaudh Road	..	6.72	—	6.72
6. Jagraon-Dalla Road	..	7.20	—	7.20
7. Qila Raipur Railway Station Approach Road	..	3.46	—	3.46
8. Khanna-Bhari Road	..	—	14.40	14.40
Total	..	49.44	36.80	86.24
Village Roads				
1. Chhapar-Mari Road	..	2.88	—	2.88
2. Gil Railway Station Approach Road	..	1.20	—	1.20
3. Sahnewal Railway Station to Village Road	..	0.24	—	0.24
4. Mullanpur Railway Station Approach Road	..	0.43	—	0.43
5. Machhiwara-Charan Kanwal Sahib Road	..	1.41	—	1.41
6. Jamalpur-Chakar Road	..	3.52	—	3.52
7. Jaspalon Approach Road	..	2.08	—	2.08
8. Ludhiana-Sidhwan Bet Road	..	—	36.80	36.80
9. Jagraon-Ghalib Road	..	4.00	3.68	7.68
10. Jagraon-Sidhwan Road	..	—	0.40	0.40
11. Pakhowal-Dehlon Road	..	—	8.58	8.58
12. Samrala-Behlolpur Road	..	6.00	9.76	15.76
13. Bagli-Isru Road	..	—	11.20	11.20
14. Samrala-Bhari Road	..	—	15.66	15.66
15. Samrala-Chawa Road	..	—	11.00	11.00
16. Alour-Kheri Road	..	7.60	2.00	9.60
17. Khanna-Isru Road	..	—	12.80	12.80
18. Baddowal Railway Station to Village Road	..	—	0.67	0.67

		Metalled Roads (Kms.)	Un-metalled Roads (Kms.)	Total Roads (Kms.)
19.	Salem Tabri Approach Road ..	—	0.06	0.06
20.	Utalan-Bhangal Road ..	—	3.20	3.20
21.	Bassian-Lakha Road ..	—	9.60	9.60
22.	Saraba-Raikot Road ..	1.60	12.80	14.40
23.	Khanna-Amloh Road ..	—	1.30	1.30
24.	Aligarh-Bhundri Road ..	—	17.60	17.60
25.	Pakhowal-Raikot Road ..	—	12.80	12.80
26.	Bassian-Manoki Road ..	—	8.66	8.66
27.	Bassian to Bassian Rest House Road ..	—	1.60	1.60
28.	Raikot-Malerkotla Road ..	—	0.32	0.32
29.	Loudhowal-Nurpur Bet Road ..	8.30	—	8.30
30.	Jagraon-Bhundri Road ..	9.30	8.30	17.60
31.	Jodhan-Narangwal Road ..	5.70	—	5.70
32.	Dugri-Dhandra Road ..	1.60	—	1.60
	Total ..	55.86	188.79	244.65
	Grand Total ..	105.30	225.59	330.89
	C. Roads Maintained by Municipal Committees			
1.	Ludhiana Municipality ..	215.13	56.08	271.21
2.	Doraha Municipality ..	3.50	0.63	4.13
3.	Jagraon Municipality ..	4.40	3.20	7.60
4.	Raikot Municipality .	2.63	3.88	6.51
5.	Samrala Municipality ..	2.40	2.66	5.06
6.	Khanna Municipality .	3.64	2.69	6.33
	Total ..	231.70	69.14	300.84
	Grand Total (A+B+C) ..	806.10	322.80	1,128.90

(*Sources* : Executive Engineer, Ludhiana Provincial Division, Ludhiana ;
Sub-Divisional Officer, Panchayati Raj, P.W.D., Ludhiana ; and
Secretaries, Municipal Committees Ludhiana, Doraha, Jagraon, Raikot, Samrala and Khanna).

सत्यमेव जयते

APPENDIX II

(Vide page 331)

Number of Different Types of Motor Vehicles on Road in Ludhiana District, 1961-66

Year	Motor Cycles	Auto-rick-shaws	Jeeps	Pri-vate cars	Motor cars	Other pub-lic servic vehicles	Goods vehi-cles	Tractors	Misc-ella-neous	Total
1961 .. (as on 31st March)	548	..	41	368	9	123	307	..	24	1,411
1962 ..	..	..	..	..	..	..	..	..	..	..
1963 ..	1,076	8	17	603	43	103	381	..	70	2,301
1964 ..	964	29	35	625	16	204	528	..	338	..
1965 ..	1,387	23	13	658	49	130	602	..	4	2,866
1966 ..	1,825	10	24	747	60	127	..	2,645	..	..

(*Statistical Abstracts of Punjab*, 1962 to 1966)

APPENDIX III

(Vide page 332)

Bus Routes Operated by Ludhiana Sub-Depot of the Punjab Roadways, Chandigarh

Serial No.	Name of route		No. of daily trips	Route length (Kms.)	Total daily service (Kms.)
1	Ludhiana-Ferozepore	..	4	128·0	1,024·0
2	Khanna-Samrala	..	2	16·0	64·0
3	Ludhiana-Dhudike	..	1	57·6	115·2
4	Ludhiana-Sidhwan Bet	..	4	54·4	435·2
5	Ludhiana-Jagraon	..	1½	40·0	120·0
6	Raikot-Jagraon	..	9½	24·0	456·0
7	Ludhiana-Raikot	..	7½	43·2	648·0
8	Ludhiana-Barnala	..	1	81·6	163·2
9	Ludhiana-Malaudh	..	5	48·0	480·0
10	Ludhiana-Hissar	..	1	240·0	480·0
11	Ludhiana-Rara Sahib	..	2	52·8	211·2
12	Ludhiana-Khanna	..	3	43·2	249·2
13	Ludhiana-Jarg	..	2	67·2	268·2

Serial No.	Name of route		No. of daily trips	Route length (Kms.	Total daily service (Kms.)
14	Ludhiana-Baddowal	..	2	46·4	185·6
15	Ludhiana-Apra	..	2	27·2	108·8
16	Ludhiana-Nawanshahr (via Buhara)	..	5	49·6	496·0
17	Ludhiana-Nawanshahr (via Rahon)	..	3	56·0	336·0
18	Ludhiana-Garhshankar	..	1	62·4	124·8
19	Ludhiana-Shahkot	..	3	67·2	403·2
20	Ludhiana-Mehatpur	..	1	57·6	115·2
21	Ludhiana-Talwan	..	1½	43·2	129·6
22	Ludhiana-Jandiala	..	3	44·8	268·8
23	Ludhiana-Machhiwara (via Kohara)	..	3	35·2	211·6
24	Ludhiana-Machhiwara (via Samrala)	..	1	44·8	89·2
25	Ludhiana-Kumkalan	..	1	27·2	54·4
26	Ludhiana-Nangal	..	2	152·0	608·0
27	Ludhiana-Mahmasinghwala	..	2	24·0	96·0
28	Ludhiana-Machhiwara-Gujarwal	..	2	43·2	172·8
29	Ludhiana-Chandigarh	..	1	96·0	192·0
30	Ludhiana-Gujarwal	..	1	32·0	64·0
	Local Routes				
1	Mata Rani-Gil	..	56	8·8	985·6
2	Vaishno Devi-Model Town	..	27½	11·2	616·0
3	Mata Rani-Sahnewal	..	8½	16·0	272·0
4	Postal Colony-Sahnewal (via Jamalpur)	..	9	25·6	460·8
5	Clock Tower-Lalton	..	7½	12·8	192·0
6	Clock-Tower-Mattewala	..	16½	17·6	580·8
7	Clock Tower-Dehlon	..	7	20·8	251·2

(*Source* : General Manager, Punjab Roadways, Chandigarh)

APPENDIX IV (Vide page 332)

Bus Routes operated by Private Transport Companies in Ludhiana District as in December 1966

Transport Company/Routes		No. of daily trips	Route length (Kms.)	Total daily service (Kms.)
I. The Akal Transport Co., Private Ltd., Ludhiana				
1. Ludhiana-Jagraon	..	18¼	40	1,460
2. Ludhiana-Sidhwan Bet	..	5	54.4	544
3. Jagraon-Hatur	..	4	25.6	102·4
4. Jagraon-Chakar	..	2	22.4	89.6
5. Jagraon-Kishanpura	..	2	32	128
6. Jagraon-Mallah	..	1	17.6	35.2
7. Ludhiana-Dhudike	..	1	57.6	115.2
8. Ludhiana-Abohar	..	½	211.2	211.2
9. Ludhiana-Khemkaran	..	½	179.2	179.2
II. Ludhiana Transport Co., Private Ltd., Ludhiana				
1. Ludhiana-Raikot	..	18½	44	1,716
2. Ludhiana-Pakhowal	..	2½	29	145
3. Ludhiana-Pakhowal-Barundi	..	½	36	36
4. Ludhiana-Phallewal	..	2	29	116
5. Raikot-Jagraon	..	7½	24	360
6. Ludhiana-Bhatinda	..	1	145	290
7. Raikot-Barnala	..	1	39	78
8. Jullundur-Barnala		1	143	286
III. The Nankana Sahib Transport Co., Private Ltd., Ludhiana				
1. Ludhiana-Samrala	..	4½	35	315
2. Ludhiana-Raikot	..	1	43	86
3. Ludhiana-Jagraon	..	1¼	40	100
4. Ludhiana-Pakhowal-Barundi	..	1	32	64
5. Jagraon-Moga	..	½	32	32
IV. The National Transport and General Co., Private Ltd., Ludhiana				
1. Ludhiana-Samrala	..	10	35	700
2. Ludhiana-Machhiwara (via Kohara)	..	3	35	210
3. Ludhiana-Kacha Machhiwara	..	1	56	112

Transport Company/Routes		No. of daily trips	Route length (Kms.)	Total daily service (Kms.)
4. Ludhiana-Ropar (via Chamkaur Sahib)	..	1	86	172
5. Samrala-Ropar	..	4	51	408
6. Khanna-Machhiwara	..	12	26	624
7. Khanna-Kurali	..	5	42	420
8. Samrala-Kurali	..	8	42	672
9. Ludhiana-Ropar (via Kurali)	..	1	93	186
10. Ludhiana-Kharar	..	1	80	160
11. Samrala-Kharar	..	2	45	180
V. The Dasmesh Transport Co., Private Ltd., Ludhiana				
1. Ludhiana-Ambala Cantt.	..	9½	113.6	2,158.4
2. Ludhiana-Khanna	..	3½	43.2	302.4
3. Ludhiana-Malaudh	..	4	48	384
4. Ludhiana-Gujarwal	..	1	32	64
5. Ludhiana-Hissar	..	1	235.2	470.4
6. Ludhiana-Dhamot-Baddowal	..	2	48	192
7. Ludhiana-Nabha	..	1	78.4	156.8
VI. The Nirbhai Roadways, Private Ltd., Ludhiana				
1. Ludhiana-Khanna-Ambala Cantt.	..	2½	113.6	568
2. Ludhiana-Khanna	..	½	43.2	43.2
3. Ludhiana-Malaudh (via Ahmadgarh)	..	3	48	144
4. Ludhiana-Nabha	..	1	78.4	156·8
5. Ludhiana-Gujarwal	..	2	32	128
6. Ambala Cantt.-Ferozepur City	..	½	256	256
7. Ludhiana-Jarg-Jaurapuri	..	1	70.4	140.8
VII. The Sheikhupura Transport Co., Private Ltd., Ludhiana				
1. Ludhiana-Jullundur	..	3	59.2	355.2
2. Ludhiana-Nawanshahr (via Rahon)	..	3	56.8	340.8
3. Ludhiana-Nawanshahr (via Buhara)	..	1	49.6	99.2
4. Ludhiana-Raikot	..	4	43.2	345.6
5. Raikot-Jagraon	..	1	24	48
6. Ludhiana-Ambala Cantt.	..	1	113.6	227.2

Transport Company/Routes		No. of daily trips	Route length (Kms.)	Total daily service (Kms.)
7. Ludhiana-Malaudh	..	4	48	384
8. Ludhiana-Ropar (via Kurali)	..	1	92.8	185.6
9. Ludhiana-Ropar (via Chamkaur Sahib)	..	1	86.4	172.8
10. Ludhiana-Shahkot	..	1	67.2	134.4
11. Ludhiana-Talwan	..	1½	47.2	141.6
VIII. The Satluj Transport Co., Private Ltd., Jullundur				
1. Jullundur-Ludhiana	..	29	60	3,480
2. Ludhiana-Nawanshahr	..	11	60	1,320
3. Ludhiana-Apra	..	2	26	104
4. Ludhiana-Phillaur (Local)	..	8	16	256
5 Ludhiana-Jandiala	..	3	44	264
6. Ludhiana-Shahkot	..	1	68	136

(*Source* : Transport Companies concerned)

APPENDIX V

(Vide page 334)

Railway Passenger Traffic for the year 1965-66

सत्यमेव जयते

Station		Monthly average traffic		Monthly average earnings	
		Outward (Nos.)	Inward (Nos.)	Passengers (Rs.)	Parcel (Rs.)
I. Mughal Sarai-Amritsar Section					
1. Khanna	..	51,910	23,485	41,928	4,884
2. Doraha	..	17,090	7,940	17,508	409
3. Sahnewal	..	15,296	2,766	14,893	1,111
4. Ludhiana Jn.	..	2,69,137	2,06,076	8,28,043	33,035
II. Ludhiana-Hissar Section					
1. Gil	..	8,428	7,528	2,705	25
2. Jassowal	..	7,330	7,077	3,296	10
3. Qila Raipur	..	18,520	13,725	8,790	105
4. Gungrana	..		(Flag Station)		

Station	Monthly average traffic		Monthly average earnings	
	Outward (Nos.	Inward (Nos.)	Passengers (Rs.)	Parcel (Rs.)
5. Ahmadgarh ..	32,635	18,427	21,903	1,065
III. Ferozepore Cantt -Ludhiana Section				
1. Bhanohad Punjab ..	4,269	3,520	2,087	5
2. Mullanpur ..	13,848	12,759	33,561	10,330
3. Jagraon ..	36,626	30,154	31,512	2,064
4. Nanaksar ..	8,379	8,082	4,746	95

(*Source* : Station Masters)

APPENDIX VI

(Vide page 334)

Railway Goods Traffic for the year 1965-66

Station	Monthly average traffic		Monthly average earnings	
	Outward (Quintals)	Inward (Quintals)	Outward (Rs.)	Inward (Rs.)
I. Mughal Sarai-Amritsar Section				
1. Khanna ..	42,960	35,141	43,753	52,254
2. Doraha ..	11,602	7,650	844	28,427
3. Sahnewal ..	1,069	6,531	2,613	6,221
4. Ludhiana Jn. ..	43,55,283	2,53,92,817	2,11,116	8,02,001
II. Ludhiana-Hissar Section				
1. Gil ..	—	—	—	
2. Jassowal ..	—	—	—	—
3 Qila Raipur ..	150	3,590	509	815
4. Gungrana ..	—	—	—	—
5. Ahmadgarh ..	10,108	12,672	16,349	36,998
III. Ferozepore Cantt-Ludhiana Section				
1. Mullanpur ..	4,23,720	52,896	86,745	30,064
2. Jagraon ..	32,081	23,301	52,823	5,37,892

(*Source* : Station Masters)

APPENDIX VII

(*Vide* Page 337)

Dak Bungalows, Inspection Bungalows and Rest Houses in Ludhiana District as on March 31, 1966

Serial No	Place	Name	Number of suites	Name of reserving authority	Distance from Railway Station (Kms.)	Distance from Bus Stand (Kms.)
		Tahsil Ludhiana				
1.	Ludhiana	.. Electricity Rest House	2	Superintending Engineer, Punjab State Electricity Board, Ludhiana	0.40	0.40
2.	Do	.. Civil Rest House	2	Deputy Commissioner, Ludhiana	0.80	0.80
3.	Do	.. Dak Bungalow	2	Ditto	0.80	0.80
4.	Do	.. P W.D. Rest House	3	Executive Engineer, Ludhiana Provincial Division, Ludhiana	1.60	1.60
5.	Kohara	.. Civil Rest House	2	Deputy Commissioner, Ludhiana	..	..
6.	Ludhiana	.. Railway Rest House (Officers)	2	Divisional Engineer, Northern Railway, Ferozepore Cantt.	--	0.40
7.	Do	.. Railway Rest House (Class III Employees)	3	(No need of reservation)	—	..
8.	Do	.. Railway Rest House (Class IV Employees)	2	Ditto	—	..
9.	Do	.. Canal Rest House	3	Superintending Engineer, Sirhind Canal Circle, Ludhiana	2.40	2.40
10.	Bul	.. Canal Rest House	2	Executive Engineer, Ropar Division, Sirhind Canal, Ropar	..	3.20

11. Lil ..	Ditto	2	Ditto	..	..
12. Jagerha ..	Ditto	2	Ditto	3.20	..
13. Pamali ..	Ditto	2	Executive Engineer, Ferozepore Division, Sirhind Canal, Ferozepore	..	0.80
Tahsil Samrala					
14. Samrala ..	Panchayat Samiti Rest House	2	Executive Officer, Panchayat Samiti, Samrala	..	0.80
15. Khanna ..	P W D. Rest House	2	Executive Engineer, Ludhiana Provincial Division, Ludhiana	0.80	0.80
16. Garhi ..	Canal Rest House	2	Executive Engineer, Irrigation Branch, Ropar	..	3.20
Tahsil Jagraon					
17. Jagraon ..	Civil Rest House	2	Deputy Commissioner, Ludhiana	0.80	0.80
18. Bassian ..	Canal Rest House	2	Executive Engineer, Sidhwan Division, Sirhind Canal, Ludhiana	..	..
19. Sidhwan ..	Ditto	2	Ditto	..	0.80
20. Akhara ..	Ditto	2	Executive Engineer, Irrigation Branch, Ferozepore	4.80	..
21. Chakar ..	Ditto	2	Ditto	..	6.40
22. Akalgarh ..	Ditto	2	Ditto	..	0.80
23. Doraha ..	Forest Rest House	2	Divisional Forest Officer, Ludhiana Forest Division at Phillaur (District Jullundur)	0.32	0.96
24, -Do	Canal Rest House	4	Executive Engineer, Ropar Division, Sirhind Canal, Ropar	2.40	3.20

APPENDIX VIII

(*Vide* Page 337)

Post Offices in Ludhiana District as on October 31, 1966

	Branch Post Offices
Head Post Office	
1. Ludhiana ..	1. Birmi
	2. Dhandari Kalan
	3. Dhandari Khurd
	4. Hiran
	5. Halwara
	6. Jamalpur Awana
	7. Jandiali
	8. Khasi Kalan
	9. Kohara
	10. Loudhowal
	11. Mundian Kalan
	12. Pohir
	13. Nurpur
	14. Ramgarh
	15. Sahibana
	16. Sarih
	17. Toosey
Sub-Post Offices	
2. A. S. College, Khanna S.O. ..	1. Bija Kalan
	2. Bagli Kalan
	3. Bhourla
	4. Daudpur
	5. Chack Mafi
	6. Daheru
	7. Lalauri Kalan
	8. Rapalon
	9. Rahawan
	10. Salaudi
	11. Seh

	Branch Post Offices
3. Baddowal S.O., C.O. ..	1. Ayali Kalan
	2. Barewal
	3. Pamal
	4. Pamali
	5. Sunet
4. Baini Ram Street, Ludhiana T.S.O.	
5. Bagh Khazanchian, Ludhiana T.S.O (L.S.G.)	
6. Brahampuri, Ludhiana T.S.O. (L.S.G.)	
7. Bharat Nagar, Ludhiana T.S.O.	
8. Bassian S.O. ..	1. Binjal
	2. Jhorran
	3. Nathowal
	4. Pheru Raien
9. Bhari S.O. ..	1. Fatehgarh Nehwan
	2. Goh
	3. Goslan
	4. Hargana
	5. Manupur
	6. Kheri
	7. Kotla Badla
	8. Kotla Ajner
	9. Kotla Bhari
10. Civil Lines, Ludhiana T.S.O., C.O.	
11. Christian Medical College, Ludhiana T.S.O..	
12. Dakha S.O. ..	1. Bassian
	2. Bhanohar
	3. Chak Kalan
	4. Dewatwal
	5. Gahaur
	6. Hasanpur

	Branch Post Offices
Dakha S.O.—concld.	
	7. Hambran
	8. Isewal
	9. Porain
13. Dehlon S.O. ..	1. Butahri
	2. Hans Kila
	3. Jhamat
	4. Kalhar
	5. Karamsar
	6. Khatran Chaharam
	7. Lehl
	8. Sihar
	9. Saharan Mazra
14. Doraha C.O. ..	1. Buwani
	2. Bilaspur
	3. Ghaloti
	4. Ghurani Kalan
	5. Ghangas
	6. Jaspalon
	7. Jatana
	8. Kadon
	9. Lapran
	10. Muqsudra
	11. Rajgarh
15. Gungrana S.O. ..	1. Barundi
	2. Chappar
	3. Dhulkot
	4. Kalak
	5. Khera
	6. Latala
	7. Rachhin
	8. Ranguwala
16. Girson Knitting Works, Ludhiana T.S.O. (L.S.G.)	

सत्यमेव जयते

	Branch Post Offices
17. Gujarwal C.O. ..	1. Chaminda
	2. Phallewal
18. Gil S.O. ..	1. Alamgir
	2. Dhandra
	3. Duleh
	4. Jaspal Bangar
	5. Jassowal
	6. Lahara
	7. Sangowal
19. Grain Market, Khanna T.S.O.	
20. Gurdev Nagar, Ludhiana T.S.O.	
21. Guru Nanak Engineering College, Ludhiana S.O.	
22. Halwara S.O., C.O.	
23. Ikbalganj, Ludhiana T.S.O.	
24. Industrial Colony, Ludhiana T.S.O.	
25. Industrial Estate, Ludhiana T.S.O.	
26. Jagraon S.O., C.O.	1. Akhara
	2. Aligarh
	3. Bodawala
	4. Chakar
	5. Chachari
	6. Chhajawal
	7. Chimna
	8. Dalla
	9. Dhangian
	10. Dholan
	11. Ghalib Kalan
	12. Hans

सत्यमेव जयते

	Branch Post Offices
Jagraon S.O. C.O—*concld.*	13. Kamalpur
	14. Kaonke Kalan
	15. Malk
	16. Mallah
	17. Manoki
	18. Nanaksar
	19. Rasulpur
	20. Roomi
	21. Sherpur Kalan
	22. Sujapur
27. Jagraon City T.S.O., C.O.	
28. Jagraon Tahsil T.S.O.	
29. Jail Road, Ludhiana T.S.O.	
30. Jarg E.D.S.O.	
31. Khalsa College, Gurusar Sadhar ..	1. Abuwal
	2. Akalgarh
	3. Bopa Rai Kalan
	4. Hissowal
	5. Raqba
	6. Rattowal
	7. Sadhar
	8. Saraba
	9. Sahauli
32. Katani Kalan, S.O. ..	1. Bhaini Sahib
	2. Chhandaran
	3. Ghulal
	4. Jonnewal
	5. Kum Kalan
	6. Kot Gangu Rai
	7. Dhandra
	8. Madpur

	Branch Post Offices
33. Khanna, S.O., C.O. ..	1. Bahu Majra
	2. Bhamaddi
	3. Chakohi
	4. Ghungrali Rajputan
	5. Ikolahi
	6. Isru
	7. Mohanpur
	8. Nasrali
	9. Rajewal
	10. Rohno Kalan
	11. Kishangarh
34. Qila Raipur ..	1. Asi Kalan
	2. Bhutta
	3. Ghawadi
	4. Gurm
	5. Mahmasinghwala
	6. Mukandpur
	7. Narangwal
	8. Shankar
	9. Jartauli
	10. Saya Kalan
35. Lalton Kalan, S.O. ..	1. Lalton Khurd
	2. Mansuran
	3. Dad
	4. Dolon Khurd
	5. Jodhan
36. Labour Colony, Ludhiana, T.S.O.	
37. Ludhiana City, T.S.O., C.O., (L.S.G.)	
38. Ludhiana Katchehry, T.S.O., C.O.	
39. Lajpat Rai Market, T.S.O., (L.S.G.)	

सत्यमेव जयते

	Branch Post Offices
40. Machhiwara, S.O., C.O.	1. Bahlolpur
	2. Chhaurian
	3. Hambowal
	4. Jodhwal
	5. Poawat
	6. Takhran
	7. Sherpur Bet
	8. Panjgrain
41. Madhopuri, Ludhiana, T.S.O., (L.S.G.)	
42. Malaudh, S.O.	1. Ber Khurd
	2. Dodhal Kalan
	3. Ramgarh Sardaran
	4. Sidhan Daud
	5. Kuhli Kalan
43. Man, S.O.	1. Jassowal Kalan
	2. Sohian
44. Millerganj, Ludhiana, T.S.O., C.O., (L.S.G.)	
45. Model Town, Ludhiana, T.S.O., C.O., (L.S.G.)	
46. Manoki	1. Bhamipura
	2. Dehrka
	3. Hatur
	4. Lakha
	5. Lamma
47. Mullanpur Mandi, C.O., (L.S.G.)	1. Jangpur
	2. Khandur
	3. Mohi
	4. Mullanpur
	5. Mandiani
	6. Pandori
	7. Dhat
48. New Model Town, Ludhiana, T.S.O.	

	Branch Post Offices
49. Pakhowal, S.O., C.O. ..	1. Andlu
	2. Nangal Kalan
	3. Nangal Khurd
	4. Bhaini Darera
50. Payal, C.O. ..	1. Dhamot
	2. Jargari
	3. Hol
	4. Nizampur
	5. Rauni
	6. Sihaura
	7. Sirthala
	8. Barmalipur
51. Punjab Agricultural University, Ludhiana, (T.S.O., C.O.)	
52. Raikot, S.O., C.O. ..	1. Atiana
	2. Bhaini Baringan
	3. Burj Hari Singh
	4. Heran Hans
	5. Rajoana Kalan
	6. Tejpur
	7. Talwandi Rai
53. Rampur, S.O. ..	1. Begowal
	2. Rampur
54. Sawaddi., S.O. ..	1. Gurah
	2. Majri
	3. Talwandi Kalan
	4. Talwandi Khurd
	5. Bhundri
	6. Bhyrowaj
	7. Mor Karima
	8. Sheikhpura

	Branch Post Offices
55. Samrala, S.O., C.O. ..	1. Bondli
	2 Hedon
	3. Kakrala Kalan
	4. Kotala
	5. Kotla Shamaspur
	6. Malmazra
	7. Manki Baghaur
	8. Nagra
	9. Utalon
	10. Sarwarpur
	11. Sihala
56. Sahnewal, S.O., C.O. ..	1. Kanech
	2. Nandpur
	3. Jugiana
57 Sidhwan Bet, S.O. ..	1. Bangsipura
	2. Jandi
	3. Lilan
	4. Malsian Bajan
	5. Ramgarh Bhullar
	6. Sadarpura
	7. Tihara
	8. Raowal
	9. Sodhiwala
58. Sidh Peeth, Ludhiana, T.S.O.	
59. Satsang Road, Ludhiana, T.S.O.	
60. Sidhwan Khurd, S.O. ..	1. Sidhwan Kalan
	2. Bairsal
	3. Birk
	4. Buzrag

	Branch Post Offices
61. Salem Tabri, Ludhiana, S.O. ..	1. Bhattian
	2. Mangat
62. Samrala Road, Ludhiana, T.S.O.	
63. Morinda, S.O. (District Ropar) ..	1. Chari
	2. Jatana Uncha
	3. Khamanon Kalan
	4. Sanghol

H.O.	.. Head Office ..	1
S.O.	.. Sub-Offices ..	60
E.D.S.O.	.. Extra D partmental Sub-Office ..	1
E.D.B.O.	.. Extra Departmental Branch Offices ..	254
	Total ..	316
The above include the following :—		
T.S.O.	.. Town Sub-Offices (in Ludhiana proper only) ..	26
C.O.	.. Combined (Post and Telegraph) Offices ..	24

(*Source* : Senior Superintendent of Post Offices, Ludhiana Division, Ludhiana)

APPENDIX IX
TELEPHONES

(Vide page 339)

Telephone Exchanges and Trunk and Long Distance Public Call Offices in Ludhiana District as at the close of 1966

Telegraphs Division	Telegraphs/Telephone Sub-Division	Telephone Exchanges					Public Call Offices		
		Name of Exchange	Year of opening	No. of connections: Main	No. of connections: Extensions	Parent Exchange	Name of place	Year of opening	Parent Exchange
Ambala (North) ..	Ambala (North) Telegraph Sub-Division ..	Doraha	1954	30	—	—	*Payal	1954	Doraha
Do	Do	Sahnewal	1964	17	1	Ludhiana			
Do	Do	Samrala	1964	37	2	—			
Do	Ambala Telegraphs Sub-Division ..	Khanna	1951	214	16	—			
Do	Do	Machhiwara	1964	19	—	Khanna			
Do	Patiala Telegraphs Sub-Division ..	..	—	—	—	—	Dehlon	..	Ahmedgarh (District Sangrur)
							Qila Raipur	..	Do
Ferozepore ..	Ferozepore (East) Telegraphs Sub-Division ..	Jagraon	1937	105	26	—	*Raikot	..	Jagraon
							Bassian	1959	Jagraon
Do	Do	Mullanpur	1644	23	—	Ludhiana			
Jullundur (East) ..	Ludhiana Telegraphs Sub-Division ..	Ludhiana (Main)	1914	983	147	—	**Halwara	..	Ludhiana
Do	Do	Ludhiana (Millerganj)	1963	1030	145	—			

*P.C.Os. with extensions.

**P.C.Os. provided with Messenger Service Facility.

(*Sources*: Punjab Circle, Telephone Directory, March, 1967; Divisional Engineers Telegraphs, North Division, Ambala; Ferozepore Division, Ferozepore; and East Division, Jullundur)

CHAPTER VIII

MISCELLANEOUS OCCUPATIONS

Miscellaneous occupations, such as public service, learned professions including law, engineering, medicine, etc., and the domestic and personal services, in all employ about 19,766 persons. However, no regular occupational survey of the district has yet been undertaken.

Ludhiana is predominantly a rural district, with about 69.2 per cent of its population living in villages. According to 1961 Census, total population of the district comprised 10,22,519 persons, of which 7,07,776 were rural and 3,14,743 urban. Agriculture is the main occupation of the people in the rural areas. The total number of workers of the district, according to 1961 Census was 2,95,019 (2,03,775 rural and 91,244 urban). The Census of 1961 registered 1,29,787 as cultivators and agricultural labourers and the remaining 1,65,232 as other workers. Of the total working force, 53,216 were engaged in 'Other Service', which included services like generation and supply of electricity and water besides sanitary, medical and public health, legal, business, recreational and personal services. They also included general labourers engaged in other miscellaneous jobs. After the partition the new national set up and the development economy in the country has opened up new avenues of employment and there has been a large increase in these occupations. The main reasons to which the increase can be attributed are the general facilities of the city life, where these occupations are concentrated. The rapid industrial development in the district, especially since the partition, has provided unprecedented scope for the people to take up diverse new occupations like hosiery goods and cycle spare-parts manufacturing industry.

The urban population in the district is mostly non-agriculturist and depends upon industries, commerce, transport, construction services and other miscellaneous occupations. Persons in services and earning through miscellaneous sources form a very small proportion of the total population of the district. They include Government or semi-Government servants and persons employed in education, law, medical, engineering, personal and domestic services, etc.

Public Services.—Jobs in Government offices are, as ever, highly valued in society. During recent years, the number of such jobs has considerably increased, as new development departments have come into existence in the district. With the opening of Pilot Project for intensive cultivation, which is being implemented in the district since 1961, there has been a considerable rise in the number of Government servants employed in the development

blocks and under the Pilot Project Scheme. Ludhiana district has been included in the Intensive Agricultural Development Programme (I.A.D.P.) since 1961-62, which has resulted in the employment of a number of persons under the scheme in the district. The number of State Government employees, including Central Government and local bodies employees, etc., in the district according to 1961 Census was 6,529.

The State, the Central and Local Government institutions provide different amenities for their employees in the form of dearness and house-rent allowances, provident fund benefit, free medical service, loans for construction of houses and purchase of vehicles, advances for the purchase of wheat, etc. The Government provides free accommodation to police employees. The Ministry of Railways provide quarters on nominal rent and issue free and privilege passes for travel to employees and their families. Uniforms are also provided to them. Class IV employees under the State and Central Governments are also given free liveries. Patwaris are paid house rent at the rate of Rs. 6 per month. Security of service, pension and other such amenities attract people to Government service.

A good number of public employees' unions function in the district. These Unions have been formed by Government employees to safeguard their service interests and for recreational and cultural purposes. A list of such unions has been given on pages 610—12 of Chapter XVII 'Other Social Services.'

Army.—The recruiting centre at the district headquarters provides recruits to the Defence Services in very large numbers. The District played a prominent part during the World Wars I and II. The number of recruits provided by the district to the Armed Forces during World War II was 29,878. The recruits from the district also got gallantry awards during the War. During Jammu and Kashmir operations the district received 2 Maha Vir Chakras and 8 Vir Chakras as gallantry awards. About 350 parents in the district got war jagirs. These jagirs were given to the parents who enrolled three or more sons during the World War II.

On March 31, 1966, the number of ex-servicemen (military pensioners) in the district was 14,643. A large number of servicemen belonging to this district fought in the NEFA and Ladakh against the Chinese in 1962 and won gallantry awards. During the conflict with Pakistan in 1965, this district, too, provided a good number of soldiers, who fought bravely and won gallantry awards.

Educational Services.—Ludhiana has been a progressive district in the sphere of education. It is one of the highly advanced districts of the State

so far as education is concerned. The First Revised Settlement Report of Ludhiana district, 1878—83, records, "The district is not backward in comparison with the average of province"[1]. With the dawn of independence, the district has made further remarkable progress in the field of education. On March 31, 1966, besides professional institutions, there were 9 colleges, 33 higher secondary schools (including 3 multi-purpose), 91 high schools, 89 middle schools and 675 primary schools (including 43 basic schools) in the district.

The number of teachers employed in primary, middle, high/higher secondary schools and colleges in the district in 1965-66 was. 3,456, 2,437, 1,094 and 641 respectively.[2]

The pay scales of the teachers are fairly good, as compared with those of their counter parts in other professions. The teachers with two years' service are also permitted to appear in certain Ucversity examinations privately by the Punjab University. There is paucity of trained science teachers,—especially women teachers, for their appointment in rural areas. The absence of the provision of suitable residential accommodation in villages compels teachers to reside in urban areas and travel daily to and back from schools. This greatly hampers the extra-curricular and social activities of schools.

Medical Profession.—These services include persons employed in medical services rendered by organisations and individuals such as hospitals, nursing homes, maternity and child welfare clinics as also by unani, ayurvedic, allopathic and homeopathic practitioners and persons employed in maternity services. In olden days people in rural areas could not seek medical advice at the time of illness. The number of doctors and medical practitioners is on the increase. The medical practitioners generally have their small clinics and dispense their own prescriptions. In view of the obligations of a welfare Government to provide medical aid to citizens, the State has opened Hospitals, Health Centres and Dispensaries which are manned by qualified doctors, *vaids* and *hakims*.

On the veterinary side, a net-work of veterinary hospitals and dispensaries has been spread in the district to improve the cattle breed and treat various diseases among animals.

There are four big private hospitals located at Ludhiana—Miss Browns' Memorial Hospital, Daya Nand Hospital, Kapur Maternity Hospital and Akki Bai Eye Hospital, which are rendering very useful service to the public. Besides, there are Civil Hospitals at Ludhiana and Khanna.

1. Gorden Walker, "*Final Report on the Revision of Settlement of Ludhiana District, 1878-83, p. 77*".
2. *Statistical Abstract of Punjab*, 1967, p. 387.

The associations formed by the members of medical profession in the district are Ayurved Mandal, Ludhiana ; The All-India Homeopathic Medical Association, Ludhiana Branch ; The National Medical Association of India ; Punjab Branch, Ludhiana and All-India Private Medical Practitioners' Association, Ludhiana.

The number of Doctors, Vaidyas/Hakims, Upvaidyas, compounders, Midwives, Nurses and Dais in the district in 1966 was 1,359, 19, 19, 3,842, 3,188 and 793, respectively[3].

Legal Profession.—The legal profession is an important occupation in the district. It has attracted an increasing number of persons in recent years. The profession includes barristers, advocates, pleaders and *munshis*. According to 1961 Census, there were 276 persons engaged in legal services.

Engineering Profession.—The engineering services are fairly well-represented at the district headquarters. The persons employed in engineering services of the Government departments have been discussed in the Chapter XIII 'Other Departments'. In addition to these, there are a number of persons who are carrying on their profession as contractors, architects or consulting engineers. The number of architects, engineers and surveyors, according to 1961 Census was 276.

Transport Services.—Transport plays an important part in the economy of the district. The district, after partition, has developed into a nerve centre of transport. In 1965-66, there were as many as seven private transport companies operating in the district. The goods transport has also received a considerable fillip, due to rapid industrialisation of the district.

The transport workers employed in the various transport companies include drivers, conductors, etc. According to 1961 Census, there were 9,612 persons engaged in transport, storage and communication services, against 2,105 in 1951.

Besides the motor vehicle companies, there are rickshaw pullers, tonga-drivers and scooter rickshaw-drivers. The rickshaw owners invest money on the purchase of the vehicles and rent them out to rickshaw pullers. The rickshaw charges in the district are moderate. Tongas have received a setback after partition owing to the increasing popularity of the rickshaws and automobiles. There are only a few tongas seen plying on the city roads, but these are still in use for taking passengers to the country side. The growing use of of the buses and tempos (three wheeled vehicles) by the villagers in recent years has adversely affected the income of country *tongawalas*, too.

3. *Statistical Abstract of Punjab*, 1963, pp. 321 and 328.

Few motor-car owners can afford to keep a driver. Almost all of them drive their cars themselves. Transport workers, like drivers, conductors and cleaners have been employed by the transport companies. They are provided with facilities, such as uniforms, bonus and allowance for overtime. Their income and social status is far better than that of the rickshaw pullers and tonga drivers. The transport workers have their unions to safeguard their interests.

Personal Services.—Among these are included barbers, washermen, laundry services, tailors, water carriers, weavers, cobblers, carpenters and the like. The following services employ a considerable number of persons :—

Barbers.—The old practice of engaging *Lagi* (*nai*) is still in vogue in nearly all the villages, but this has become altogether out-of-date in urban areas of the district. In villages the barber is still required to be present on certain religious ceremonies, besides attending to clients at their houses. He gets his remuneration in kind at the time of harvesting.

The hair-dressing saloons in urban areas are becoming popular. The practice of visiting the houses of their customers by the barbers is fast disappearing. The customer also finds it more convenient and cheaper to visit the saloon. The barbers have their well-arranged shops with latest implements for hair dressing and cutting, where they charge 75 paise to Rs. 1.25 paise for a hair cut and 25 to 30 paise for a shave. There is also one lady hair-dressing saloon in Ludhiana. The barbers in rural area, however, continue visiting the houses of their customers. The wife of barbar, called *nain*, does some sort of periodical hair cleaning and hair dressing of the women folk of the families to which the barber is attached.

The persons employed in this profession were 1,076 according to 1961 Census as against 267 in 1951. The barbers in the towns have their unions, which enjoin upon members to follow certain rules and regulations concerning their economic and social condition. Tuesdays are generally observed as holidays by the barbers and they keep their saloons closed.

Washermen.—Most of the washermen live in urban areas, because the villagers generally do their washing themselves. The laundries in urban areas have become much popular these days and these do both washing and ironing of clothes. The laundry business has adversely affected washermen, since laundry-men are more prompt and efficient as compared to old style washermen. In Ludhiana, a number of concerns are engaged in dry-cleaning business and most of them have their own plants. They charge about Rs. 3 for the dry-cleaning of a woollen suit.

The total number of washermen, which was 678 according to 1951 Census, rose to 1527 in 1961. The average rates for washing and ironing throughout the district vary from 20 to 25 paise and 10 paise respectively.

Tailors.—The number of tailors, cutters, furriers and related workers in the district was 5,335 according to 1961 Census, out of which 2,522 were urban tailors. The urban tailors make pants, trousers, coats, shirts, bush-shirts, cotton and woollen-suits for men and women, jackets, nightgowns, achkans, skirts, lady-coats, salwars and blouses. The tailors in rural areas generally make 'kurtas', pyjamas, shirts, underwears, salwars and *ghagras*. The rural tailors have now started making bush-shirts. The rates charged by the tailors in urban and rural areas vary very much.

The tailors both in rural and urban areas are now paid in cash. Most of the tailors have their own sewing machines and work independently. They also work on commission basis with some good concerns. The old practice of tailors working at the houses of clients is still in vogue on marriages. The elite of the town or the general public on occasion of marriages or big orders may call tailors to their houses.

Other Miscellaneous Occupations.—Under the category, persons like shoe-makers, potters , sweepers, handcart-peddlers, railway or bus station-porters and vendors, etc., are included. The shoe-makers, sweepers and potters are spread throughout the district. Their number according to 1961 Census was 25,118. Most of them in rural areas render help in agricultural activities, on marriage occasions, etc. The sweepers in urban areas are engaged in scavenging and other sanitary services, whereas they work as agricultural labourers in rural areas. The sweepers engaged for scavenging in ruban areas of the district get Rs. 3.00 per month in addition to a chapati daily and other gifts on auspicious occasions.

The average earning of this class of workers is hardly Rs. 150 per month. Generally they reside at one end of the town or in slum areas. In Ludhiana, weavers have taken to powerlooms.

Domestic Servants.—The persons engaged as domestic servants include cooks, house-keepers, maids, etc. Their number according to 1951 Census was 5,614, but it fell to 2090 in 1961. The fall in the number of domestic servants and other related workers is attributed to the fact that after Independence many small and medium scale industries like hosiery, machine-tools, cycle and cycle-spare parts, sewing-machines, etc., have come up. These provide better avenues of employment, and the domestic servants have changed over from the domestic service to factories. Moreover, with the rise in the wages of the domestic servants and the cost of living index, the middle class families have

dispensed with the domestic servants. The wages of domestic servants vary from Rs. 50 per month in addition to food, clothing and accomodation.

Few women domestic servants are available for whole-time employment. Part-time women domestic servants are, however, available at cheap rates. These are mostly poor women, often called *Mais*, trying to supplement the meagre income of other members of their families. They do the cleaning of utensils, washing clothes, sweeping of the houses and cooking. A part-time *Mai* doing all the three odd jobs in a house is available at a cheap rate of about Rs. 15 per month.

सत्यमेव जयते

CHAPTER IX

ECONOMIC TRENDS

(a) **Livelihood Pattern and General Level of Prices and Wages.**— Economic trends serve as a yardstick for measuring economic stability and progress in a district. They are indicative of the state of economy. Progressive and dynamic trends bring about fundamental changes in the structure of the economy of a district.

The economy of the Ludhiana District has certain special features in striking contrast with other districts of the State. A progressive farming sector, large and small-scale industrial sector distinguish Ludhiana from other districts. Besides farming, representing a powerful factor, the growing industry is also a dynamic feature in the economy of the district. After partition in 1947, the livelihood pattern in the district has undergone radical change in villages in general and in towns in particular. The classification of workers in the district in 1961 according to livelihood is given below:

Classification of workers	**Number of persons according to 1961 Census**					
	Rural		*Urban*		*Total*	
	Males	Females	Males	Females	Males	Females
1. Cultivators ..	99,971	4,732	1,991	75	101,962	4,807
2. Agricultural Labourer ..	22,145	176	685	12	22,830	188
3. Mining, quarrying, livestock, forestry, fishing, plantation, etc.	1,150	96	726	42	1,876	138
4. Household industry ..	19,525	3,509	4,543	1,690	24,068	5,199
5. Manufacturing other than household industries ..	10,063	256	28,602	651	38,665	907

Classification of workers	Number of persons according to 1961 Census					
	Rural		Urban		Total	
	Males	Females	Males	Females	Males	Females
6. Construction ..	2,693	1	2,825	33	5,518	34
7. Trade and Commerce	6,910	80	18,864	135	25,774	215
8. Transport, storage and communication	2,483	—	7,111	28	9,594	28
9. Other Services ..	27,766	2,219	20,026	3,205	47,792	5,424
Total ..	192,706	11,069	85,373	5,871	278,079	16,940
10. Non-workers ..	187,765	316,236	85,460	138,039	273,225	454,275
Total population	380,471	327,305	170,833	143,910	551,304	471,215

(*Ludhiana District Census Handbook*, 1961 pp.164-65).

About 43.9 per cent of the population of the district is dependent upon agriculture. The remaining 56.1 per cent of the population depends upon non-agricultural activities, of which commerce and industry claim 2.5 per cent and about 7 per cent, respectively, of the working force. The most important category of persons is engaged in iron and hosiery industries. The other important category of persons not engaged in agriculture is absorbed in services, who form about 5.1 per cent of the total population of the district.

The household in urban and rural areas comprises five to six members on the average. The break-up of the household according to 1961 Census is given in Appendix I at pages 382-83.

The dwellings in urban areas are almost all pukka. Facilities of bath-rooms and latrines, etc., are mostly available. The houses in new townships are provided with all modern amenities. In rural areas the dwellings comprise *kachcha* as well pukka portions. The houses generally contain a big *dalan* which has no partition, or in certain cases are provided with a *baithak* for guests, etc. The cattle fodder is generally kept in a separate portion or (*Haveli*) built for the purpose of keeping cattle.

After the reorganisation of the Punjab in 1966, the Economic and Statistical Adviser to Government, Punjab, conducted a survey of the family budgets of 9 cultivators in the Punjab for the year 1965-66. The survey was based on the accounts of the nine families of peasant proprietors of the State. These accounts represented more or less the typical peasants in Hoshiarpur, Ropar, Amritsar, Jullundur, Ludhiana, Patiala and Ferozepore Districts. The findings revealed that on an average, a peasant proprietor's family spent 56 per cent of its income on food, 12 per cent on clothing and 8 per cent on housing. The remaining 24 per cent was spent on education, fuel, lighting, medicine, travelling, religious and social functions and amusements, etc.

In Ludhiana District, Sarinah family was selected for the survey. The budget of this family studied in the year 1965-66, showed a surplus of Rs. 2,157.64 (the total income being Rs. 7,592.59 and expenditure Rs. 5,434.95).

Ludhiana is one of the richest districts of the State. Except Ferozepore District, the per capita income in this district is the highest. The people in the district mostly take cereals, like wheat and maize. Rice is also taken on festive occasions. Wine is quite common in villages and is used in large quantity on ceremonies. The religious-minded and educated persons of the villages are, however, opposed to its use.

The district-wise per capita income for the year 1966-67 at the current prices as worked out by the Economic and Statistical Adviser to the Government is given below :

सत्यमेव जयते

	District		*Per Capita Income* Rs.
1.	Gurdaspur	..	614
2.	Amritsar	..	738
3.	Kapurthala	..	832
4.	Jullundur	..	704
5.	Hoshiarpur	..	615
6.	Ropar	..	586
7.	Ludhiana	..	869
8.	Ferozepore	..	877
9.	Bhatinda	..	797
10.	Sangrur	..	751
11.	Patiala	..	752

It would be revealed from above that the per capita income in Ludhiana District, except in Ferozepore District, is the highest in the whole of the reorganised Punjab.

Owing to partition in 1947, the entire economic structure of the district has undergone a change, displaced persons have replaced Mohammedans. Drastic changes have taken place in the food, dress and habits of the villagers. The villages have been linked with towns by motorable roads. Almost all the amenities of urban areas are being increasingly brought within the reach of ruralites. Literacy is increasing in villages and almost all children of school going age are being admitted in schools. As a result of rapid industrialisation of Ludhiana, both skilled and unskilled labour is shifting to the city, with the consequence that considerable shortage of skilled labour in villages is experienced.

According to 1961 Census, rural population in the district numbered 707,776 as compared to 602,218 in 1951. Since 1961 there has been increase in population in cities to the extent of 314,743 as compared to 205,887 in 1951. While favourable factors, such as continued absence of any epidemic, better health facilities and social security have been responsible for steady increase of population in rural areas, rapid industrialisation of Ludhiana has been the main reason for the remarkable increase of population in urban areas. This is also due to the general tendency of landless labourers to shift to towns from villages, in order to avail themselves of better employment opportunities.

Prices and Wages.—In order to assess the economic condition of the people, the comparative study of prices and wages is vitally important. Besides, variations in the prices of silver and gold, rise in population, condition of production, inflation, exports and imports also play an important part. Change of season, rainfall and other physical factors also cause temporary fluctuation in the prices. From the beginning of the 20th century there has been a radical change in the purchasing power of the rupee. Even though detailed statistics are not available, it is strangely true that the prices of land during the first two decades of the 20th century have risen more than the wages of labour and wages of labour have risen more than the cost of production. However, the World War I (1914—18) had a salutary effect on all sections of Indian society. The labourer was comparatively the gainer as his wages rose more rapidly than the cost of production. Then followed a general depression of the twenties. It brought in its wake slumps in the market and unemployment and downward trends in the prices of agricultural produce.

The conditions during the third decade of the present century (1921—31) were partially the after effects of the previous decade that witnessed the culmination of adverse circumstances on an unprecendented scale. The unrest prevalent in the district was not peculiar to it, but had a world wide

range as an aftermath of the First World War (1914—18). During 1921—31, the wages continued to be high, while the prices of food-stuffs maintained a downward trend. This crisis continued up to 1927-28 and the land-holders found it difficult to find tenants. A slight fall in wages was noticed in 1928-29 whereafter it continuously rose upwards. In his report for the year ending 30th June, 1931, the Director of Land Records, Punjab, recorded that the wages of agricultural labour have gone down to some extent, though not in proportion to the decline of the prices.

On the outbreak of World War II, in September, 1939, the people in the district were also affected by this catastrophe. The prices of all goods rose high on account of scarcity conditions created by the War. Wages also increased and have shown a continued rise since then. Even after partition (1947) the trend of rise in wages and prices could not be checked and continued rising. This trend was not much perceptible during the First and the Second Five-Year Plans. From the middle of Third Five-Year Plan, the price index has shown a steep and unprecedented rise in the prices without any corresponding rise in wages. The development has become a cause of considerable hardship to the labour class.

The wages for various workers in rural areas are paid either in cash or in kind or both. A casual labourer is usually paid in cash, whereas the smith, the carpenter, the water carrier (*jhewir*) or the potter is usually paid in kind. Domestic servants in urban and rural areas are paid partly in cash and partly in kind. However, the practice of payment of wages in kind is on the wane and people prefer to pay and receive wages in cash.

The rates of pay fixed for the inferior servants and artisans employed in various departments of Ludhiana District by the Deputy Commissioner, Ludhiana, for the year 1967-68 are given in Appendix II at pages 384—86.

The trend of prices of agricultural products other commodities, etc., as on 25th March, 1966, would be seen from the figures given in Appendix III at pages 387-88.

Pakhowal Village in tahsil Ludhiana was selected for the collection of information/data regarding the wages paid to agricultural and skilled labourers and rural retail prices of various agricultural commodities. The District Statistical Officer, Ludhiana, collects such information every month from village Pakhowal and sends it to the Economic and Statistical Adviser to Government,

Punjab, Chandigarh. The following two statements relating to Pakhowal village show the general trend of wages and prices in rural areas of the district :—

Statement showing the wages paid to agricultural and skilled labourers during the month of March, 1966, of village Pakhowal, tahsil Ludhiana.

Serial No.	Operation	Type of Labour	Paid in cash (Rs).	Paid in kind		Total of column 4 & 6 (Rs.)
				Commodity and quantity	Cash equivalent (Rs.)	
1	2	3	4	5	6	7
1	Ploughing ..	Man/Casual	3·00	Tea and meals twice a day	1·50	4·50
2	Weeding ..	Ditto	3·00	Ditto	1·50	4·50
3	Harvesting ..	Ditto	3·00	Ditto	1·50	4·50
4	Other Agricultural Operations ..	Ditto	3·00	Ditto	1·50	4·50
5	Blacksmith ..	Ditto	6·00	Ditto	1·50	7·50
6	Carpenter ..	Ditto	6·00	Ditto	1·50	7·50

Rural Retail prices of Agricultural Commodities for the Village Pakhowal, Tahsil Ludhiana, relating to March, 1966.

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Serial No.	Name of Commodity	Price in Rs.	Unit
1	Wheat (medium) ..	56·00	per quintal
2	Gram (black) ..	57·00	" "
3	*Sarson* ..	125·00	" "
4	Groundnut ..	130·00	" "
5	*Taramira* ..	110·00	" "
6	*Moong* ..	125·00	" "
7	*Mash* ..	100·00	" "
8	Maize ..	35·00	" "
9	Bajra ..	55·00	" "
10	Potatoes ..	45·00	" "
11	Onions (dry) ..	40·00	" "
12	*Desi* ghee (loose) ..	11·50	" kilogram

Serial No.	Name of Commodity		Price in Rs.	Unit
13	Milk (Cow and Buffalo)	..	0·75	per killo
14	*Bhusa* (cattle fodder)	..	5·00	" 40 kilos
15	*Gur pathis*	..	62·00	" quintal
16	*Shakkar*	..	80·00	" "
17	Barley	..	64·00	" "
18	Chillies (dry)	..	3·50	" kilo
19	*Sarson* oil	..	4·00	" "

(*Source* : District Statistical Officer, Ludhiana).

(b) **Employment Situation.**—As a result of the rapid industrialisation of the district the employment situation of semi-skilled workers is fast improving, but still the employment problem deserves serious consideration. In March, 1966, 4,759 persons were available on the live Register of Ludhiana Employment Exchange.

The employment problem in the district is varied and complex. Ex-service personnel are available for employment in large number. The jobs that can possibly be offered to them are those of Peons, Chowkidars and Beldars; but unfortunately these jobs are not alluring. They are reluctant to accept these posts with meagre salaries because their pay-scales were much better in the army. The most important and common feature of the problem, however, is the immobility of the labour force. The people of this district are reluctant to accept employment in other districts, as they generally want jobs at the stations where they reside. The result is that while the people of this district are unemployed, the jobs in other districts of the State sometimes remain unfilled due to lack of suitable incumbents. The difficulty regarding immobility of labour is greater among women. The present day economic pressure has compelled woman to enter the labour market to augment the income of the family; but they find it difficult to move out to take up jobs away from their residential localities. Lack of suitable residential accommodation, hostel facilities, etc., are also the main reasons for this immobility in the case of working women.

The motor drivers generally remain on employment list, though the demand is more than the supply. The reason for this is that they being illiterate are unable to know about the vacancies advertised by the State recruiting agency in the newspapers. The ministerial and other technical posts in

the public sector are filled by the S.S.S. Board and Punjab Public Service Commission. Candidates in these categories register themselves with the employment exchange in exceptional cases presuming that the agency can at best give them short-term appointments. Candidates from better-off families generally do not feel interested in the make-shift arrangement.

Undoubtedly, the district is very advanced in the field of agriculture. Even agriculturists go in for studies in Agriculture. After acquiring degrees in Agriculture, the graduates do not revert to their lands in order to undertake scientific agriculture, but instead, they hanker after employment in Government service. Such candidates also rarely approach employment exchange as the posts requiring specialised qualifications in Agriculture are filled by the Public Service Commission/the Subordinate Services Selection Board in the State.

The inhabitants of the district are mainly dependent on agriculture. Ludhiana is also one of the highly industrialised cities in the State. With rapid industrialisation, the need for technical and non-technical personnel has increased considerably. This, of course, has led to the increase in the temptation among the labour class of the neighbouring villages who could not resist to migrate to this city in order to earn their livelihood due to the fact that there were definitely better economic opportunities available here. So much so, many of the *Bhaiyas* from Utter Pradesh have also concentrated in this city and are generally engaged in unskilled jobs.

सत्यमेव जयते

Employment Exchange.—The Employment Exchange was opened at Ludhiana in the year 1947, soon after partition. The statement showing the working of the Employment Exchange, Ludhiana, during the years 1957—66 is given in Appendix IV at page 389.

The table presents the employment position of the entire revenue district of Ludhiana. It would be revealed that the number of unemployed persons on the Live Register of the Employment Exchange, Ludhiana, decreased from 5,258 on 31st December, 1965 to 4,759 on 31st December, 1966. The number of vacancies notified to the Employment Exchange, Ludhiana , too, decreased considerably from 3,618 during the year ending 31st December, 1965, to 610 during the year ending 31st December, 1966.

The number of persons registered with the Employment Exchange, Ludhiana, was 2,679 during the year 1966 as compared to 15,217 during 1965.

The number of persons unemployed according to sex and educational levels, both in urban and rural areas in the district as per 1961 Census is given below[1]:

Unemployment in Urban Areas by Sex and Educational Levels

	Total Un-employed		
	Persons	Males	Females
Total ..	2,382	2,197	185
Illiterate ..	337	327	10
Literate (without educational level) ..	180	175	5
Primary or Junior Basic ..	770	732	38
Matriculation or Higher Secondary ..	873	819	54
Technical diploma not equal to degree ..	15	4	11
Non-technical diploma not equal to degree ..	19	4	15
University degree or post-graduate degree other than technical degree ..	137	112	25
Technical degree or diploma equal to degree or post-graduate degree— ..	51	24	27
(i) Engineering ..	..	..	..
(ii) Medicine ..	4	2	2
(iii) Agriculture ..	1	1	..
(iv) Veterinary and Dairying ..	..	..	..
(v) Technology ..	..	..	..
(vi) Teaching ..	37	12	25
(vii) Others ..	9	9	..

Unemployment in Rural Areas by Sex and Educational Levels

	Total Un-employed		
	Persons	Males	Females
Total ..	2,899	2,732	167
Illiterate ..	394	388	6
Literate (without educational level) ..	196	195	1
Primary or Junior Basic ..	860	828	32
Matriculation and above ..	1,449	1,321	128

1. *Census of India*, 1961, Vol. XIII, *Punjab, Part* II-13(f), pp. 400 and 410.

Employment Market Information.—This scheme is intended to watch the trends of employment in the State so as to make available to Government and to the Planning Commission the data about the contraction and expansion of employment in various industries and occupations to enable the Government to assess the impact of the different development plans on employment. The information thus collected is utilized to assist the Government in determining the location of certain training institutions and the trades to be taught therein.

The Employment Exchange (Compulsory Notification of Vacancies) Act, 1959, came into force from May, 1, 1960. It has made it obligatory for all establishments in the public and the private sectors employing 25 persons or more to notify all vacancies to the employment exchange. Simultaneously the scheme for collection of employment market information provides employment information for the benefit of the Central as well as the State Governments, the employers and persons seeking employment. The scheme aims at the analytical study of employment conditions and co-ordination among existing agencies and sources of employment information. It also helps to improve the methods of obtaining employment data and ensures timely completion, examination and publication of results obtained on the basis thereof.

The statement below will clearly show the changes in the volume of employment both in private and public sectors as in December, 1965, and December, 1966:

Industrial division	No. of establishments		No. of employees	
	December, 1965	December, 1966	December, 1965	December, 1966
Manufacturing ..	527	524	16,244	16,270
Trade and Commerce ..	46	47	1,439	1,688
Transport, storage and communications ..	62	52	3,712	3,687
Services ..	289	284	20,532	21,348
Total ..	924	907	41,927	42,993

Vocational Guidance.—The Vocational Guidance and Employment Counselling Programmes are designed to give intensive vocational guidance to those who seek such assistance. The programme of vocational guidance consisting of reception, invitational talks, group discussions, individual information

and registration interviews is conducted for fact-finding, recording and individual guidance purposes by the Employment Officer. It is intended to improve the quality of 'registration' and 'submission'—the two basic procedures of the employment exchange. The Vocation Selection Committee through proper administration and objective interpretation and appropriate tests and standardised interviews in respect of certain vacancies conducted by Employment Officer definitely improves the quality of submissions. In fact the spirit of vocational guidance permeates all functions of the employment exchange, which caters to the needs of employment seekers and employers and consequently enchances the utility of the employment service.

The Vocational Guidance Unit in the Employment Exchange, Ludhiana, was started in March, 1961. It provides vocational guidance and employment consultation to youth and adults. It assists the youth in finding suitable institutional or implant training and apprenticeship facilities. It also collects occupational information from various industrial establishments and educational institutions. This unit has recently been called upon to administer Standardised Aptitude Test in order to find out the technical aptitude of those who desire to seek admission in the Industrial Training Institutes. The following figures show the work done by this Unit till March, 1966:—

No. of individuals provided group guidance	..	381
No. of persons given individual guidance	..	84
No. of persons given individual information	..	174

(c) **Planning and Community Development.**—The partition of the country in 1947 and the consequent transfer of population in the Punjab gave another serious jolt to the rural community life. The whole economy of the district was seriously dislocated. Acute shortage of labour and capital was felt in the industrial sector. The newly constituted State of Punjab (India) had become deficit in the field of agricultural production, because the fertile and surplus areas were left in West Pakistan. The absorption of unskilled and illiterate labour posed a serious problem. To effectively check economic deterioration, planned development on countrywide scale was undertaken. The Planning Department in the Government of India was entrusted with the task of drawing up the Five-Year Plans. Due stress was to be laid on the improvement of all the sectors, especially agriculture in view of the pressing food problem created in the country as a result of the partition. During the period of planned development, from 1951-52 to 1960-61, covering the first two Five-Year Plans, the district has been able to regain stability in a large measure. Against this background it became possible for the Government to lay more stress on industry in the Third Five-Year Plan. Considerable surplus lands

and waste lands were brought under the plough. With the provision of extensive agricultural facilities, use of improved types of implements and fertilizers, there has been marked progress in the production of various agricultural commodities.

The Community Development Project Scheme owes its origin to the recommendations of the Planning Commission. According to Planning Commission, the central object of the scheme is to secure the fullest development of the material and human resources of the particular areas. The scheme makes a comprehensive approach to the social and economic aspects of rural life and includes within its scope activities relating to agriculture, education, co-operation, animal husbandry, minor irrigation, communications, employment, housing, cottage industries and social welfare.

Community Development.—The Community Development Programme was started to raise the living standard and to ameliorate the conditions of rural population. Ludhiana district is one of the most progressive districts of the State in agriculture and on that very basis the district was selected for Intensive Agricultural Development Programme. The entire district has been brought under Community Development affecting a population of 7,87,198 persons spread over 1,001 villages (excluding uninhabited). Appendix V at page 390 gives the category of the 10 Community Development Blocks alongwith the area, villages and population covered by each of them.

The people in the district have extended the desired co-operation in the work and have also contributed liberally as and when they were required to do so. It is generally felt that the organisation of community development scheme has been greatly responsible for bringing about a change of outlook in all spheres of life in rural areas. The farmers now are greatly enlightened about the latest methods of cultivation and improved agricultural practices. The Community Development has infused the spirit of self-help and self-reliance in the minds of rural folk and has widened their outlook. The details of people's contribution till the year, 1965-66 are given in Appendix VI at pages 392—93.

The physical achievements of Community Development Blocks since the inception of the scheme are shown in Appendix VII at pages 393—94.

APPENDIX

Household

Total Rural Urban	Total No. of Sample House-holds	*Total Sample Household population*			House-holds	*Single Member Households*		*2—3 Members*		
		P	M	F		M	F	House-holds	M	F
1	2	3	4	5	6	7	8	9	10	11
Rural	23,871	1,40,960	75,552	65,408	1,791	1,399	392	3,938	5,462	4,588
Urban	12,052	61,972	33,515	28,457	1,199	1,000	199	2,708	3,926	2,887
Total	35,923	2,02,932	1,09,067	93,865	2,990	2,399	591	6,646	9,388	7,475

(*Ludhiana District Census Hand—*

सत्यमेव जयते

I

(Vide page 371)

Classification in Ludhiana District

4–6 *Members*			7–9 *Members*			10 *or more Members*		
Households	M	F	Households	M	F	Households	M	F
12	13	14	15	16	17	18	19	20
8,987	24,082	21,269	6,248	25,978	22,696	2,097	18,631	16,463
4,567	12,085	10,677	2,711	11,081	9,868	867	5,423	4,826
13,554	36,167	31,946	8,959	37,059	32,564	2,964	24,054	21,289

book, 1961, pp. 238–39)

सत्यमेव जयते

APPENDIX II

Rates of Pay/Wages fixed for the Inferior Servants and Artisans employed in various Departments of Ludhiana District

(*vide* page 374)

Serial No.	Class of employee	Pay	Dearness Allowance
		Rs.	
1	Pankha puller minor	38.00	Consolidated
2	Pankha puller major	20.00	D.A. Allowed under the prevailing rules
3	Caller woman	30.00	Do
4	Bearer	30.00	Do
5	Dak Runner	30.00	Do
6	Khansama experienced	30.00	Do
	Khansama assistant	20.00	Do
7	Langri experienced	30.00	Do
	Langri assistant	20.00	Do
8	Boiler attendant	30.00	Do
9	Tailor	50.00	Do
10	Boat man	30.00	Do
11	Flag man	70.00	Consolidated
12	Chainman	80.00	Consolidated
13	Mochi	30.00	D.A. Allowed under prevailing rules
14	Camel-man	30.00	Do
15	Chowkidar	30.00	Do
16	Water carrier	30.00	Do
17	Steam Road Roller Driver	117.50	Consolidated
18	Mate	35.00	D.A. allowed under rules
19	Sprayman for bituma Tar etc.	95.00	Consolidated
20	Fireman	30.00	D.A. allowed under rules
21	Beldar	30.00	Do
22	Oilman and cleaner, Government Industrial School, Ludhiana	40.00	Do
23	Cow boy	30.00	Do
24	Workshop Mazdur	100.00	Consolidated
25	Sweeper	30.00	D.A. allowed under the prevailing rules

(Contd.)

Serial No.	Class of employee		Pay	Dearness Allowance
	PART-TIME		Rs.	
26	Sweeper Tahsils compound and Rest Houses		50.00	Consolidated. They have to work at least for half day.
27	Sweeper at other places		27.00	Consolidated. They have to work at least twice a day (1½ hours each time)
28	Water carrier		17.50	Do
29	Sweepers at Police Lock ups		4.00	D. A. proportionate as allowed under rules
30	Water carrier at Police Lock-ups		4.00	Do
31	Sweepers at Judicial Lock-ups	..	15.00	Consolidated
32	Water carriers at Judicial lock-ups	..	15.00	Do
33	Chowkidar	..	33.00	Do
34	Cook	..	33.00	Do
35	Beldar Government Institute Dyeing and Printing	..	25.00	Do
	DAILY WAGES			
36	Mason, Carpenter and Blacksmith	..	6.00 to 8.00 per day	
37	Wireman, Mistri, Ist Class	—	6.00 to 8.00 per day	
38	Workshop Mazdur	..	3.00 to 3.50 per day	
39	Store-Mazdur	..	3.00 to 3.50 per day	
40	Cooli-boy	..	1.50 to 2.50 per day	
41	Painter, Ist Class	..	5. 00 to 6.00 per day	
42	White Washer	..	4.00 to 5.50 per day	
43	Hammer-man	..	3.50 to 4.00 per day	
44	Agricultural labourer Agricultural Mate	.. ..	4.50 per day 4.50 to 5.00 per day	
45	Senior Supervisor	..	5.50 per day	
46	Mate	.	4.00 per day	
47	Tractor Driver	.	5.50 per day	
48	Tube well operator	.	4.50 to 5.50 per day	
49	Cattle catcher	.	3.00 to 4.00 per day	
50	Mazdur woman	..	2.50 to 3.00 per day	
	For N.C.C. Camps for short duration in the district			
51	Halwai	..	6.00 to 7.00 per day	
52	Water carrier	..	4.00 per day	
53	Bearer	..	5.00 per day	
54	Sweeper	..	4.00 per day	

(contd.)

Serial No.	Class of employee	Pay	Dearness Allowance
		Rs.	
55	Barber ..	12.00	(Subject to the condition that there may be at least 80 persons to be shaved in the camp).
56	Labourer and Chowkidar ..	4.00 per day	
57	Boot maker mochi ..	8.00 per day	
58	Carpenter and Blacksmith ..	7.00 to 8.00 per day	
59	Cook ..	5.00 per day	
60	Head cook ..	6.50 per day	
61	Painter ..	4.50 to 6.50 per day	
62	Mate ..	4.00 per day	
63	Lineman, Fitter, Wireman, Plumber and E.O. Driver	5.00 to 6.50 per day	
64	Turner, Electrician and Welder ..	5.00 to 6.50 per day	
65	Hammer man and Caneman ..	4.25 per day	
	OTHER SERVICES		
	Hire of pair of bullocks and attendant ..	155.00 per month	
	Hire of pair of bullocks without attendant ..	65.00 per month	
	Hire charges of pair of bullocks without attendant (Brief spells)	4.50 per day	
	Hire charges of pair of bullocks without attendant Half day daily	32.50 per month	
	Mule with muleman ..	6.00 per day	
	Hand Cart with driver ..	5.50 per day	
	Bullock cart driven with pair of bullocks with attendant	23.00 per day	
	Bullock cart driven by one bullock with attendant ..	12.00 per day	
	Donkey man with one donkey for every additional donkey ..	5.50 per day 1.75 per day	
	Carriage of stones per quintal kilometer ..	0.75 (Minimum 0.50 per trip)	
	Carriage of stones when a cart is engaged ..	0.60 per quintal per kilometer including loading and unloading charges	
	Part time mali for 3 hours daily ..	10.00 per month plus proportionate D.A. allowed under the rules	
	Allowance		
	IV Class employees in services for supplying drinking water and dusting offices where no part-time water carrier or sweeper is posted	10.00 per month in addition to their own usual pay	

(*Source* : Deputy Commissioner, Ludhiana)

सत्यमेव जयते

APPENDIX III

Retail Prices Schedule of Various Commodities (*Vide* page 374)

Serial No.	Commodity	Specifications and grade	Unit	Prices per Unit		
				Shop I	Shop II	Co-op. store
1	2	3	4	5	6	7
1	Wheat	Dara	Per Kgm.	0·53	0·54	..
2	Wceat Atta	(i) Mill made wheat atta from which maida, suji have been extracted (ii) Wholemeal Chakki atta of country wheat	Do	0·70	0·68	0·65
3	*Bajra*	Average Quality ..	Do	0·50	0·52	..
4	Maize	Do	Do	0·35	0·37	..
5	Maize Atta	Do	Do	0·50	0·55	..
6	Barley	Do	Do	0·80	0·80	..
7	*Besan*	Do	Do	0·85	0·85	0·85
8	*Moong Dal*	Unwashed	Do	1·35	1·35	1·35
9	*Mash Dal*	Do	Do	1·25	1·25	1·35
10	Gram *Dal*	Do	Do	0·75	0·75	0·80
11	*Mash*	Whole	Do	1·10	1·10	1·10
12	*Massar Dal*	Unwashed	Do	1·10	1·10	1·00
13	Sugar	ISSB-29	Do	1·52	1·52	1·52
14	*Gur*	Desi Average Quality	Do	0·70	0·70	0·75
15	*Shakkar*	Do	Do	0·80	0·80	..
16	*Sarson* Oil	Mill Extracted (Loose)	Do	4·10	4·10	3·40
17	Ghee	Pure (Loose)	Do (Without tin)	10·50	10·50	11·00
18	*Vanaspati*	Dalda Sealed	(2 Kgm. tin)	10·32	10·32	10·32
19	Tea	Lipton (Green Label)	Packet of 500 grams	6·65	6·65	6·80
20	Salt	Sambhar, grounded	Per Kgm.	0·25	0·25	0·25
21	Black Pepper	Whole	Do	6·00	6·00	6·20
22	Chillies	Dry Desi/Red Whole	Do	4·00	4·00	4.00
23	Turmeric	Powdered, Average Quality	250 gms.	0·65	0·65	0·70

(Contd.)

1	2	3	4	5	6	7
24	*Anardana*	(Whole)	250 gms	0·75	0·75	0·85
25	*Dhania*	Do	250 gms.	1·00	1·00	1·00
26	Spices	Mixed	50 gms.	0·45	0·45	0·55
27	Milk	(i) Buffalo (as sold by gawalas)	Per Kgm.	1·00	1·00	..
		(ii) Cow	Do	0·95	0·95	..
28	Curd	Mixed	Do	1·20	1·20	..
29	Sweetmeats	Boondi, Laddu of Vegtable Ghee	Do	3·50	3·50	..
30	Mutton	Average Quality	Do	4·00	4·00	..
31	Eggs	Hen	Per Dozen	2·75	3·00	..
32	Almonds (*Badam*)	Average Quality	Per Kgm.	10.00	10·00	10·00
33	Raisins (*Kishmish*)	Do	Do	9·00	9·00	9.00
34	Brinjals	Round	Do	0·60	0·60	..
35	Cauliflower	Desi	Do	0·90	0·90	
36	Cabbabe (*Band Ghobi*)	Do	Do	0·30	0·30	..
37	Carrot (*Gajjar*)	Desi (Plains)	Do	0·20	0·20	..
38	Spinach (*Palak*)	Desi	Do	0·20	0·20	..
39	Raddish (*Muli*)	Do	Do	0·35	0·35	..
40	Turnips (*Salgam*)	Do	Do	0·35	0·35	..
41	Bottle Gourd (*Ghiya Kadu*)	Do	Do	1·00	1·00	..
42	Peas (*Mattar*)	Do	Do	0·75	0·75	..
43	Ginger (*Adrak*)	Do	Do	1·50	1·50	..
44	Onion (*Piaz*)	Do	Do	0·50	0·50	..
45	Garlic (*Thom*)	Do	Do	1·25	1·25	..
46	Potatoes (*Alu*)	Do	Do	0·40	0·40	..
47	Tomatoes	Do	Do	0·75	0·75	..
48	Lemon (*Nimbu*)	Do	Do	2·00	2·00	..
49	Bananas	Harichal	Per dozen	1·00	1·00	..
50	Organges	Nagpuri	Do	2·50	2·50	..

(*Source*: District Statistical Officer, Ludhiana)

APPENDIX IV

(*Vide* page 377)

Working of Employment Exchange, Ludhiana, 1957—66

Year	No. of registration during the year	No. of vacancies notified	No. of applicants placed in employment during the year	Applicants on on live register at the end of the year	Monthly No. of employers using the exchange	No. of vacancies being carried over at the end the of year
1	2	3	4	5	6	7
1957 ..	8,784	1,767	1,101	2,396	575	171
1958	9,784	1,842	1,423	2,673	630	124
1959 ..	11,683	2,178	1,506	3,532	676	146
1960 ..	10,623	2,259	1,407	2,839	635	241
1961 ..	11,304	2,349	1,676	2,897	747	255
1962 ..	12,651	3,119	1,892	4,273	1,016	296
1963 ..	12,947	3,690	1,725	3,707	1,098	277
1964 ..	13,202	3,986	1,924	4,706	1,256	415
1965 ..	15,217	3,618	1,652	5,258	1,268	384
1966 ..	2,679	610	355	4,759	206	374

(*Source* : District Employment Officer, Ludhiana.)

APPENDIX V

Areas, Villages and Population covered by Community Development Blocks in Ludhiana District as on 31-3-66.

(*Vide* page 381)

Serial No.	Name of the Block	Date of initial allotment	Category at the time of initial allotment	Date of coversion to other categories, if any	Present category of the Block	Area covered in square kilometres	Number of Villages covered	Population covered
1	2	3	4	5	6	7	8	9
1	Ludhiana ..	1-10-54	Community Development	1-4-65	National Extension service Stage III	515.09	77	88,594
2	Jagraon ..	1-4-56	Stage I	1-4-61	Post Intensive	277·90	49	94,102
3	Samrala ..	1-10-53	Community Development Stage I	Stage II 1-4-59 Stage III 1-4-64	Stage III	315·20	107	80,792
4	Sidhwan Bet ..	1-4-57	Stage I	Stage II 1-4-63 Post Stage II 1-4-68	Post Stage II	407·09	84	58,352
5	Machhiwara ..	1-4-58	National Extension service	1-4-64	Stage II	578·56	222	1,06,257
6	Dehlon ..	1-4-60	Pre-Extension	Stage I 1-4-61 Stage II 1-4-66	Stage II	278·35	79	77,581
7	Mangat at Salem Tabri ..	1-10-60	Pre-Extension Block	Stage I 1-10-61 Stage II 1-10-66	Stage II	545·45	196	65,335
8	Pakhowal ..	1-10-60	Stage I	1-10-61	Stage II	285·42	64	76,321
9	Doraha ..	2-10-52	Community Project	Stage II 1-4-56 Stage III 1-4-62	Stage III	326·00	82	74,830
10	Sudhar ..	1-10-60	Pre-Extension	Stage I 1-10-61	Stage II	297·49	41	65,034

APPENDIX VI

APPENDIX

People's contribution towords the Community

Serial No.	Name of the Block	Agriculture and Animal Husbandry	Irrigation	Reclamation	Health and Rural Sanitation	Education	Social Education
1	2	3	4	5	6	7	8
1	Ludhiana ..	1,50,935	..	..	5,20,536	6,98,260	1,62,797
2	Jagroan ..	23,600	7,000	5,000	1,12,159	2,52,563	35,668
3	Samrala ..	6,811	10,75,000	25	93,568	1,46,880	3,580
4	Sidhwan Bet ..	58,000	..	..	12,405	10,504	..
5	Machhiwara ..	9,070	21,950	9,219	1,60,810	2,34,969	92,897
6	Pakhowal ..	..	..	..	..	..	..
7	Dehlon ..	5,000	3,29,790	24,000	1,16,128	82,410	20,900
8	Mangat at Salem Tabri ..	..	..	..	11,550	30,500	6,540
9	Doraha ..	1,84,900	2,56,825	98,800	79,072	1,08,655	68,980
10	Sudhar ..	3,380	..	..	7,339	..	..

सत्यमेव जयते

VI

Development Blocks in Ludhiana District till March, 1966.

(Vide page 381)

(In Rupees)

Community Recreation Centres	Communications	Village and Small scale industries	Housing	Other works Programme	Total	Cash and other contribution	Labour
9	10	11	12	13	14	15	16
1,35,900	26,92,381	28,330	..	18,21,518	61,04,802	7,36,202	11,39,637
3,600	5,80,588	6,772	2,800	45,334	10,75,984	..	..
—	1,05,439	—	80,350	5,944	6,04,887	4,57,417	1,47,470
—	24,120	—	..	2,146	3,19,755	3,19,755	..
—	3,21,105	3,000	97,930	9,022	10,59,882	1,62,449	7,39,272
—	39,273	—		—	5,073	12,000	39,273
—	60,021	—	—	—	6,48,249	—	28,552
—	2,11,592	1,600	—	2,000	2,63,782	—	—
27,890	2,63,162	2,750	1,67,000	1,00,220	13,68,254	7,03,162	6,65,092
—	—	—	—	1,25,198	1,32,536	—	—

APPENDIX VII

Physical Achievements of Community Development Blocks in Ludhiana District till March, 1966

(Vide page 381)

Serial No.	Name of the Block		Chemical Fertilizers distributed	Agricultural Demonstrations held	Improved seeds distributed	Maternity and child welfare centre	Rural Latrines constructed	Wells constructed	Pucca drains constructed
1	2		3	4	5	6	7	8	9
			Quintal		Quintal				Km.
1	Ludhiana	..	1,76,233.76	33,083	49,233.21	2	360	55	70,938.25
2	Jagraon	..	1,14,792	6,076	10,858	11	321	25	40,308
3	Samrala	..	49,850	15,026	5,270	—	–	6	195.06
4	Sidhwan Bet	..	55,920	964	1,430	2	—	43	800.00
5	Machhiwara	..	30,368	2,665	4,528.91	2	4	—	2,331
6	Dehlon	..	1,83,276.20	8,543	15,8[illegible]7.09	4	71	5	21,613
7	Mangat	..	1,44,098	2,779	18,500	—	1	2	2,836
8	Pakhowal	..	2,07,362	45	3,301.71	7	180	37	2,979
9	Doraha	..	2,59,386	3,221	53,137.25	3	114	50	64,213
10	Sadhar	..	3,655	111	158.1	2	3,572	—	154 Metres

(contd.)

APPENDIX—Concld.

Physical Achievements Community Development Blocks in Ludhiana District till March, 1966

Serial No.	Name of the Block	Schools converted into basic ones	Literary Centres started	Adults made literate	Community Centres started	New-co operative Societies	Pucca roads constructed	Kachcha roads constructed	Existing roads improved	Demonstration-cum-Training centres started
1	2	10	11	12	13	14	15	16	17	18
							Km.	Km.	Km.	
1	Ludhiana ..	1	63	1,068	62	546	27.4	467.63	913.38	27
2	Jagraon ..	7	59	1,051	30	38	410	358.5	222.25	—
3	Samrala ..	7	142	909	55	160	3.5	284	363	—
4	Sidhwan Bet ..	—	44	853	7	43	19.2	4	14.20	—
5	Machhiwara ..	—	7	60	1	5	—	5	15	25
6	Dehlon ..	—	4	4	8	6	1.6	80	32	4
7	Mangat ..	—	7	235	4	4	19	161	35	—
8	Pakhowal ..	—	15	246	15	138	6	308	46	12
9	Doraha ..	4	126	2,534	45	181	13	2,331	1661	18
10	Sadhar ..	—	—	—	37	—	—	9.8	44	—

CHAPTER X

GENERAL ADMINISTRATION

(a) **Historical Background and Sub-Divisions of the District.**—During the British rule the district administration was mainly confined to the performance of such duties as were believed to ensure their supremacy and general peace and order among the subjects. All other duties which might minister to the welfare of the people were discounted. As such, greater attention appears to have been paid to the Departments of Police, Jails, Judiciary, Land Revenue, Excise etc. The only other Department which deserved attention was the Public Works, but here again the activities of construction and maintenance, apart from roads and irrigation works, were confined to buildings required for Government departments. It was after World War I (1914-18) under the Reforms Scheme of 1919 that emphasis began to be laid on beneficient Departments like Education, Health and Agriculture, etc. With the introduction of provincial autonomy in 1937 (under the Government of India Act, 1935) the Departments concerned with development received greater attention. It was, however, after the transfer of power in 1947 that new ideas of public welfare have come to inspire the administration and comprehensive plans have been drawn up for all round social and economic betterment of the people.

In this regard it is important to remember that since very early times district administration has formed the mainstay of the Government. Through the ages district administration has continued to be a pivotal factor in the governance of the country. In India the administration of the district revolves round the district officer, who serves as a direct link between the Government and the people. For all administrative purposes the district forms the vital unit, where the local offices of all the Departments of the State Government are stationed. All administrative agencies pertaining to the district in regard to the implementation of schemes intended to cover the district are accordingly required to function under the general control of the Deputy Commissioner. As the general administrator, he is the functionary who is called upon to co-ordinate the activities of the branches of different Departments in the district—such as public Security, Public Health, Public Works, Public Instruction, Agriculture, Irrigation and Co-operation, and to integrate them in the larger interests of the district as a whole.

During the greater part of the British rule administrative units lower than the districts were not clearly defined. But gradually the need for de-

centralisation came to be felt, especially with regard to proper maintenance of peace and order in vast areas like a district. For this purpose it was thought necessary to divide the district into Sub-Divisions. The Sub-Divisional Officer, who is lower in status than and subordinate to the District Magistrate, is required to carry on the functions of the latter in specified areas. A Sub-Divisional Officer, is therefore, a District Magistrate in miniature in a smaller sphere. He is to undertake the same kind of work as the Deputy Commissioner ; but since he is to work under his direct supervision and control, his own burden of responsibility is not very heavy.

New units for the development of the district in the form of Community Development Programme have greatly added to the work load of the district officer. The object of the new movement is to undertake intensive development work-to build roads, improve sanitary conditions, organise education and public health, as a part of alround development of local community life. Since independence the structure and scope of district administration have vastly changed and expanded. The administrative machinery in the district under the new national and democratic set up is geared to achieve the ideal of welfare State. Against the above historical background it will be well to to examine the administrative set up of the Ludhiana district.

Administrative Divisions.—Administratively, the district is divided into 3 tahsils, viz., Ludhiana (including sub-tahsil Payal), Jagraon and Samrala. Previously forming part of Patiala district, sub-tahsil Payal was transferred to Ludhiana district in November, 1963. Tahsils Samrala and Jagraon were made sub-divisions in November, 1961 and the tahsil Ludhiana in April, 1965.

The number of villages and police stations in each tahsil is as under:

Tahsil	No. of Villages	Police Stations	Police Posts
Ludhiana ..	489 (including 72 villages of old sub-tahsil Payal)	1. Ludhiana City 2. Sader 3. Sahnewal 4. Dehlon 5. Payal 6. Railway 7. Ludhiana	1. Model Town, Ludhiana 2. Miller Ganj, Ludhiana 3. Police post, Doraha
Samrala ..	340 (including 10 villages of old Sub-tahsil Payal)	1. Samrala 2. Machhiwara 3. Khanna 4. Khamanon	4. Police Post, Khanna 5. Police Post, Sadhar

Tahsil	No. of Villages	Police Station	Police Posts
Jagraon	175	1. Jagraon 2. Sidhwan Bet 3. Raikot 4. Dakha	6. Police Post, Jagraon

The strength of Sub-Divisional Officers, Tahsildars and Naib-Tahsildars in the district is as under:

Tahsil	Designation	Number
Ludhiana	Sub-Divisional Officer	1
	Tahsildar	1
	Naib-Tahsildars	3
Samrala	Sub-Divisional Officer	1
	Tahsildar	1
	Naib-Tahsildars	2
Jagraon	Sub-Divisional Officer	1
	Tahsildar	1
	Naib-Tahsildars	2

(b) **District Authorities**.—(i) *Deputy Commissioner*—The general administration of the district is vested in the Deputy Commissioner. For administrative purposes, he is under the control of the Commissioner. Jullundur Division, Jullundur.

The Deputy Commissioner has a triple role to play:—

(a) As Deputy Commissioner, he is the executive head of the district in the sphere of development, co-ordination of all governmental activities, panchayats, local bodies, civill administration, etc.

(b) As Collector, he is the highest officer of the revenue administration in the district. He is responsible for the collection of land revenue, other kinds of government taxes, fees and all dues recoverable as arrears of land revenue. He is the appointing authority for most of the important subordinate revenue staff in the district and supervises and controls the work of all of them. He is responsible for the management of private estates that are held in trust by the state for minors and other disqualified persons. He is responsible for the grant and eventual

recovery of certain types of loans for agricultural improvement. He is the highest revenue judicial authority in regard to revenue cases in the district and hears certain types of revenue appeals.

(c) As District Magistrate, he enjoys first class magisterial powers, although he in fact tries few cases. He supervises all executive magistrates in the district, controls the police and supervises their work. He is concerned to some extent with the administration of jails and sub-jails. He is responsible for the issue of permits and licences for fire-arms, explosives, petroleum and cinemas. He is also responsible for the issue of passports, extension of visas and control of foreigners. Above all, he is responsible for the maintenance of law and order, prevention and suppression of crime and the preservation of peace and tranquility in the district.

As District Officer, he has many executive duties and responsibilities, the details of which vary from season to season. By and large he is responsible for the implementation of beneficient schemes, which are initiated by the Revenue Department or by any Government department having field officers working in the district. Accordingly, he is the chief co-ordinating authority on behalf of the State Government at the district level. He is expected to keep watch over the activities of all local authorities in the district and is generally responsible for their supervision and control. He pays particular attention to the implementation of various plan schemes under the Five-Year Plans, especially the Community Development Programme. He keeps the State Government informed of the condition of the district in general regarding all notable occurrences ranging from meetings of political parties to village fairs. He is responsible for the compilation of returns of prices, crop forecasts, weather reports, etc. He is responsible for the proper conduct of national, state and local elections. He maintains general control over the administration of supply and distribution of controlled articles. He is also concerned with the rehabilitation of displaced persons and famine relief, if and when necessary.

In addition to all his specific duties and responsibilities, the Deputy Commissiner holds residual powers as the State Government's representative in the district.

In short, the Deputy Commissioner is responsible for all governmental activities in the district as the principal functionary of the State Government. The Deputy Commissioner occupies a key position in his dealings with the State Government on the one hand and the people of the district on the other.

(ii) **Sub-Divisional Officers.**—The Sub-Divisional Officers exercise direct control over Tahsildars and their staff in their respective sub-divisions.

All correspondence between the Deputy Commissioner and Tahsildars is routed through the respective Sub-Divisional Officer.

The Sub-Divisional Officers have been given the powers of the Deputy Commissioner in regard to the coordination work in their respective sub-division without affecting the Deputy Commissioner's position, authority and effectiveness as the executive head of the district. This decentralisation of powers has been effected in accordance with the policy of Government to execute the work speedily and to afford substantial relief to the Deputy Commissioner in order to enable him to concentrate on other important work in the district. The Sub-Divisional Officer is the overall authority in the sub-division. He can seek advice and assistance from all the departmental officers posted in the sub-division for the smooth running of the administration and successful implementation of the developmental schemes. He can even correspond direct with the Government on routine matters. In important policy matters, however, he is required to route the papers through the Deputy Commissioner. He is to perform executive duties in the sub-division pertaining to development, local bodies, market committees, motor taxation, passport, renewal of arms licences etc.; revenue duties-executive and judicial (original and appellate) ; and maintain law and order.

(iii) **Tahsildars and staff.**—Tahsildars and Naib-Tahsildars exercise the powers of Assistant Collector 2nd Grade. In partition cases, however, Tahsildars exercise the powers of Assistant Collector 1st Grade.

Being primarily entrusted with the work of revenue collection, Tahsildars and Naib-Tahsildars have to undertake intensive touring in the district. They play an important role in the execution of development plans, construction of roads, drains, embankments, soil supervision and reclamation, pavements of streets, filling of depressions and sundry matters connected with rural re-construction. They are called upon to enlist active public co-operation for the development work and, as such, render substantial help and co-operation to the Block Development and Panchayat Officers.

The Tahsildar and Naib-Tahsildar are assisted by a Sadar-Kanungo, as incharge of the record and one Naib-Sadar Kanugo, both at the district headquarters, three Office Kanungos, one each at tehsil headquarters ; and one Patwar Moharar, seventeen Field Kanungos, one Naib Office Kanugo, 321 Patwaris and four Assistant Patwaris.

The Patwaris prepare and maintain village revenue records and revenue statistical records. The district is divided into 324 Patwar Circles.

The *Zaildari* system was abolished in 1948. Prior to that villages were grouped to form a Zail, each of which was placed under a Zaildar. In the field of general administration also, he used to assist the Government.

A Lambardar is the important functionary in the village administration Besides land revenue collection, he is required to keep watch over law and order position in his area and report any breach thereof to the nearest Police Station. He is assisted in his work by the village Chowkidar. Lambardar is paid *pachotra*, i.e., 5 per cent of the land revenue collection, which is in fact an extra charge on land revenue.

(c) **Development Organisation.**—The district is divided into 10 Development Blocks, viz., Samrala, Machhiwara, Ludhiana, Dehlon, Mangat, Pakhowal Doraha, Sudhar, Sidhwan Bet and Jagraon. (A block consists of about 60 villages). Each block was previously under the charge of a Block Development Officer. With the merger of the Panchayat Department with the Development Department, he has been vested with powers of Panchayat Officer under the Punjab Gram Panchayats Act, 1952.

A Block Development and Panchayat Officer, is under the administrative control of Chairman of the respective Block Samiti, Sub-Divisional Officer (Civil) of the respective Sub-division, pilot Project Officer (in respect of Intensive Agricultural Development Programme) and the District Development and Panchayat Officer at district level, besides being under the over all control of the Deputy Commissioner.

A Block Development and Panchayat Officer is primarily responsible for the successful implementation of the community development programme. The Extension Officers belonging to the Agriculture, Animal Husbandry, Co-operation and Industries Departments, posted in a block, are under the administrative control of the respective Block Development and Panchayat Officer. This arrangement was made after the introduction of Panchayati Raj in the State to co-ordinate the activities of the various development departments.

The Ludhiana district was brought under the Intensive Agricultural Development Programme in 1961 for a period of 5 years, in the first instance. The period was extended for another 5 years. The district was adjudged as the best in the country in respect of the increase of agricultural production. The strength of Gram Sewaks in a block was doubled on the introduction of the Programme.

(d) **Panchayati Raj.**—The Panchayati Raj is a system of decentralisation and delegation of authority to local agencies of the State Government and to set up such democratic institutions for the welfare of the people as may be chosen by them and would he answerable to them. It is a three tier system which consists of Panchaysts at village level, panchayat samities at block level and zila parishad at district level.

Panchayats.—The setting up of panchayats is a bold step forward in the process of democratic decentralisation. Panchayat is the basic unit of

Panchayati Raj and the Punjab Gram Panchayat Act, 1952 (as amended up to August 1961), provides for the establishment of a panchayat in every village with a population of not less than 500 persons and a joint panchayat for a village with lesser population by grouping it with some contiguous village or villages, so that the population of the villages so grouped is not less than 500. Thus, 669 panchayats were formed covering the rural areas of the district : Ludhiana Block 73, Mangat Block 72, Pakhowal Block 59, Dehlon Block 66, Sidhwan Bet Block 54, Jagraon Block 39, Sadhar Block 38, Samrala Block 93, Machhiwara Block 110, and Doraha Block 65.

Though the panchayats have administrative and executive, criminal, judicial and civil and revenue judicial functions, yet the role assigned to the panchayats under the Panchayati Raj is one of all-round development with particular emphasis on increased agricultural production.

The panchayati Raj is, thus, a pyramidial structure with the panchay at at the base level, the Panchayat Samiti at the intermediate level and the Zila Parishad at the apex of the structure. Virtually all programmes of economic development are to be channelled through this structure.

Panchayat Samitis.—There are ten Panchayat Samitis in the district, i.e., one in each block. Each Panchayat Samiti consists of 16 members elected by Panches and Sarpanches of Gram Panchayats in the block from amongst themselves, two members representing the co-operative societies within the jurisdiction of the Panchayat Samiti elected from amongst the members of these societies, associated members comprising M.L.As., M.L.Cs. and M.Ps. representing the constituency, co-opted members comprising two women and four persons belonging to the scheduled castes and scheduled tribes, besides the Block Development and Panchayat Officer and the respective Sub-Divisional Officer as *ex-officio* members. The associated members and ex-officio members are not entitled to vote in the meeting. The term of member was, in the first instance, fixed for three years but was subsequently raised to five years. A panchayat samiti has its own Chairman and Vice-Chairman besides the respective Block Development and Panchayat Officer as its Executive Officer. He is assisted by a number of Extension Officers from various departments, such as Industries, Agriculture, Animal Husbandry, Co-operative, Social Education, Panchayat and P.W.D. (B. & R.), etc., in order to coordinate the activities of the agencies concerned with rural development. A meeting of the Samiti is held at least once in three months.

A panchayat samiti is expected to make arrangements for the integrated development of the area under its jurisdiction in respect of agriculture, public health and rural sanitation, animal husbandry, fisheries, communications, social

education, co-operation, and miscellaneous items such as organisation and management of panchayat samiti fairs, establishment and management of cattle ponds, and management of public ferries.

Zila Parishad.—Under the Punjab Panchayat Samitis and Zila Parishads Act, 1961, the District Board, Ludhiana, was replaced by the Zila Parishad, Ludhiana, on March 1, 1962. Besides its Chairman, Vice-Chairman and Secretary, the membership of Zila Parishad comprises two members out of the primary members of each Panchayat Samiti to be elected by the Panchayat Samiti, Chairman of each Panchayat Samiti, Deputy Commissioner, members of Lok Sabha, Vidhan Sabha and Vidhan Parishad, representing the district or any part thereof, co-opted members including two women and five other persons belonging to Scheduled Castes. The term of the members was, in the first instance, fixed for three years ; but was subsequently raised to five years. The meeting of Zila Parishad is held once in three months.

(e) **General arrangement for disposal of business.**—In addition to the Sub-Divisional Officers, Tahsildars, and Block Development and Panchayat Officers, the Deputy Commissioner is assisted by 1 General Assistant, 1 District Development and Panchayat Officer, 2 Executive Magistrates, 3 Extra Assistant Commissioners (Under Training) and 1 Civil Defence Officer.

General Assistant.—He is Deputy Commissioner's principal executive officer and assists him in all his executive and administrative functions. He is mostly occupied with routine office matters and does not normaly tour in the district. He is Magistrate 1st Class but with the separation of judiciary from the executive, he is empowered to try security cases only. The various branches of the Deputy Commissioner's office generally entrusted to his supervision and control are : Record and Issue, Establishment, Nazarat, Miscellaneous, Elections, etc.

District Development and Panchayat Officer.—He is incharge of the work relating to development including local development, Five-Year Plans, Panchayats, National Extension Service, and Low Income Group and Middle Income Group Housing Schemes.

Magistrates.—The criminal work relating to security cases of the various police stations in the district is assigned to the Sub-Divisional Magistrates, District Development and Panchayat Officer, General Assistant, Executive Magistrates and Extra-Assistant Commissioners (Under Training) having powers of 1st Class Magistrate.

Civil Defence Controller.—The Deputy Commissioner is the *ex-officio* Civil Defence Controller of the district and is, as such, responsible for its civil defence. He has multifarious duties to perform at the time of aggression/conflict

or war. In addition to other duties at the time of actual emergency, his major duties pertain to appointment of Civil Defence Officers in all towns of the district, maintenance of fire-fighting equipment, proper functioning of sierns, digging of trenches, alternative arrangements of water and electricity, control over vehicles, first-aid, extension of hospital facilties by laying additional beds, replacement of police by home guards, and if necessary, maintenance and supervision of equipment and stores, etc.

In the performance of the above mentioned functions he is assisted by the Civil Defence Officer, Ludhiana, who is appointed by the State Government from amongst the P.C.S. Officers. The Civil Defence Officer has no distinctly demarcated functions attached to his office.

Revenue work.—With the formation of sub-divisions, the revenue work, previously done by the Revenue Assistant, has been transferred to the respective Sub-Divisional Officers.

Registration.—The Deputy Commissioner is the Registrar and in that capacity is responsible for registration work in the district. Contrary to the old practice, he does not hold this post as *ex-officio*. The work is attended to by the Tahsildars and Naib-Tahsildars in their respective tahsils, as the posts of Sub-Registrars have since been abolished. There is a whole time registration clerk at the district headquarters.

Official Receiver.—There is one Official Receiver at Ludhiana, appointed by Government on the recommendation of the District and Sessions Judge. He is incharge of the insolvency estates. When any person applies for insolvency, his property is put under his charge and he disposes it of according to the orders of the Insolvency Court. He keeps 7½ per cent of the proceeds as his remuneration. He also acts as Court Auctioneer and gets 4 per cent commission on the auction proceeds.

Oath Commissioners.—There are seven Oath Commissioners in the district, i.e., five at Ludhiana and one each at Jagraon and Samrala. They charge Re 1 as attestation fee for an affidavit atttested by them.

Notary Public.—There is one Notary Public at the district headquarters who is appointed on the recommendations of the Legal Remembrancer, Punjab. He is authorised to attest all documents, wills, special powers of attorney and copies of all documents on charges approved by Government. He is also authorised to translate documents on payment approved by Government. The tenure of his office is for a period of three years which may be extended for another term.

District Attorney.—Formerly designated as Public Prosecutor or Government Pleader, the District Attorney is appointed by the Secretary to Government Punjab, Home Department, on the recommendation of the Legal Remembrancer. He has a small establishment to assist him. He is not allowed to engage in private practice.

He is assisted by the Assistant District Attorney, Ludhiana, who has also some ministerial and other miscellaneous staff under him.

(f) District Committees : The following committees, most of which meet once a month at the district (headquarters) level, have been constituted to accelerate the disposal of business :—

Committee	Chairman	Secretary
Standing Committee for General Administration and Officers Board ..	Deputy Commissioner	General Assistant
District Vigilance Committee ..	Do	District Public Relations Officer
District Agriculture and Production Committee ..	Do	District Development and Panchayat Officer
Local Electrification Committee ..	Do	S.D.O. (Electricity)
District Land Improvement Committee ..	Do	Assistant Soil Conservation Officer
Revenue Officers Meeting ..	Do	Sub-Divisional Officer (Civil), Ludhiana
Committee of Sub-Divisional Magistrates, Executive Magistrates, Tahsildars and Assistant Recruiting Officers to review criminal, Judicial and revenue work ..	Do	General Assistant
District Co-ordination Committee ..	Do	Do
District Coordination between the Labour and Industries Department ..	Do	Labour Officer
House Allotment Committee ..	Do	General Assistant

Besides the above, the Deputy Commissioner is empowered to form any number of *ad hoc* committees to handle local problems like floods, locust, etc. The District Co-ordination Committee meets once a month and one of the items on its agenda relates to public complaints and grievances.

(g) Other important offices :

Police.—The Superintendent of Police is the head of the police organisations in the district and ranks only next to the Deputy Commissioner in the maintenance of law and order. This item has been discussed in detail in Chapter XII.

Judiciary.—On the separation of the judiciary from the executive on October 2, 1964 , one Additional District Magistrate now designated as Chief Judicial Magistrate, 6 Judicial Magistrates, 18 clerks and 4 Steno-typists, besides other miscellaneous staff, were transferred from the strength of the Deputy Commissioner's office to the control of the District and Sessions Jugde, Ludhiana. The item has also been discussed in detailed in chapter XII.

(h) Other State and Central Government Officers :

State Government Officers

1. Chief Medical Officer, Ludhiana;
2. Senior District Industries Officer, Ludhiana;
3. District Education Officer, Ludhiana;
4. Vice-Chancellor, Punjab Agricultural University, Ludhiana;
5. Principal, Government College, Ludhiana;
6. Principal, Government College for Women, Ludhiana;
7. Principal, Hosiery Institute, Ludhiana;
8. Principal, Government Institute of Textile Chemistry and Knitting Technology, Ludhiana;
9. Executive Engineer, P.W.D. (B&R), Ludhiana;
10. Executive Engineer, Public Health Division, Ludhiana;
11. Malaria Officer, Ludhiana;
12. District Agricultural Officer, Ludhiana;
13. Pilot Project Officer (I.A.D.P.), Ludhiana;
14. District Public Relations Officer, Ludhiana;
15. Deputy Registrar, Co-operative Societies, Ludhiana;
16. District Excise and Taxation Officer, Ludhiana;
17. District Welfare Officer, Ludhiana;

18. District Employment Officer, Ludhiana;
19. District Food and Supplies Controller, Ludhiana;
20. District Statistical Officer, Ludhiana;
21. Regional Deputy Director ,Urban Local Bodies, Ludhiana;
22. Superintendent, District Jail, Ludhiana;
23. Conciliation Officer, Ludhiana;
24. District Commander, Punjab Home Guards, Ludhiana;
25. Executive Officer, Municipal Committee, Ludhiana;
26. Agricultural Engineer (Implements), Punjab, Ludhiana;
27. Superintending Engineer, Drainage Division, Ludhiana;
28. District and Sessions Judge, Ludhiana;
29. Factory Officer, Ludhiana;
30. Superintendent of Police, Ludhiana;
31. District Animal Husbandry Officer, Ludhiana;
32. District Town Planner, Ludhiana;
33. Agricultural Engineer (Boring), Ludhiana;
34. Project Evaluation Officer, Ludhiana;
35. Sub-Divisional Officer, (Civil), Ludhiana;
36. Tahsildar, Sales, Ludhiana;
37. Superintending Engineer, Punjab State Electricity Board, Ludhiana;
38. Executive Engineer, Division No. 1, Punjab State Electricity Board, Ludhiana;
39. Executive Engineer, Division No. 2, Punjab State Electricity Board, Ludhiana;
40. Executive Engineer, Boaring, Ludhiana;
41. Treasury Officer, Ludhiana;
42. District Electoral Officer, Ludhiana;
43. Tahsildar, Elections, Ludhiana;
44. Manager, Punjab Roadways, Ludhiana;
45. General Manager, Co-operative Stores and Super Market, Ludhiana;

46. Executive Engineer, Drainage Division, Ludhiana;
47. Agricultural Development Officer, Ludhiana;
48. Superintending Engineer, Sirhind Canal, Ludhiana;
49. District Attorney, Ludhiana ; and
50. Executive Engineer, Sidhwan Division, Irrigation Branch, Ludhiana.

Central Officers (excluding Military Officers)

1. Senior Superintendent, Post Offices, Ludhiana;
2. Sub-Divisional Officer, Telephones, Ludhiana;
3. Superintendent, Central Excise, Ludhiana;
4. Income Tax Officer, Ludhiana;
5. Director, Small-Scale Industries, Ludhiana;
6. Inspector, Railway Mail Service, Ludhiana;
7. Inspector, Central Intelligence Bureau, Ludhiana;
8. Station Master, Ludhiana;
9. Local Foreman, Ludhiana;
10. Branch Manager, Life Insurance Corporation, Ludhiana;
11. Sub-Divisional Officer, Telegraphs, Ludhiana ; and
12. District Organiser, Small Savings, Ludhiana.

CHAPTER XI

REVENUE ADMINISTRATION

(a) Land Revenue Administration

(i) History of Land Revenue Assessment and Management :

Early Period.—Since times immemorial, it has been customary for a cultivator to pay something to the State. No authentic information is available of how this land tax was levied in the dim past. But from the days of Manu, the problem of administration of land revenue was one of determination of the State's share in the produce of cultivable land. Manu's account of fiscal administration of ancient Hindu States gives a graphic description of land revenue system which formed the main source of income of Government. Land revenue was levied on the gross produce of all arable land, varying according to the soil and labour required to cultivate it. In normal times, the share of the State varied between one-twelfth and one-sixth, but was liable to rise even to one-fourth in times of war and other exigencies. The land revenue was collected, not from individual cultivators but from the community represented by the headman. The aggregate harvest was collected into a common pool and the State's share was set apart by the headman before the general distribution. Between the village headman and the monarch, was a chain of civil officers and landlords of single villages to landlords of 10, 100 and 1,000 villages. The civil officers were responsible for the collection of the revenue, for which they were remunerated by fees in kind, i.e., by a portion of the King's share of the produce or by holding land free of revenue by virtue of their office.

Medieval Period

Sultanate Period.—In the beginning of the Delhi Sultanate, the State's share of the gross produce formerly demanded by Hindu kings, was converted into *Kharaj* or tribute payable on land, though the share taken was greater than before. The traditional agency of collection was also utilised. This mode of collection was soon found to be difficult and steps were taken to regulate the collections and secure a complete or partial commutation of the State's share of the produce into cash.

The land revenue was the most important source of the Sultan's income. It was derived from *Khalsa* or crown lands and *iqtas* or territories granted to officers either for a number of years or for the lifetime of the grantee. The bulk of the land revenue was farmed out to military officers and *jagirdars* who

usually collected much more than what they paid to the State. It was a vicious system for, besides entailing loss of revenue, it increased the power of the *jagirdars* to the detriment of the Sultan's authority. The rate of assessment of the land revenue was unscientific and arbitrary. It varied from time to time. Ala-ud-din made it abnormaly high, fixing it at 50 per cent of the gross produce. Muhammad bin Tuglaq perhaps raised it higher. His successor, Firuz Tuglaq earned the gratitude of the people by reducing it and by abolishing about twenty-four vexatious taxes. Summing up, it may be said that the fiscal policy of most of the Sultans ignored the interests of their subjects. The Sultans discriminated against a particular section and sequeezed them more than they did their coreligionists.

Sher Shah Suri was the first Muslim ruler to lay down sound principles of revenue administration. After a careful survey of the land, he settled the land revenue direct with the tillers of the soil and fixed the State demand at one-third of the gross produce payable either in money or kind. He instructed the revenue officers to be lenient at the time of assessment, but to be strict in the matter of collection. He allowed remission of rent in suitable cases. To save the tenants from undue harassment, their rights and liabilities were clearly defined.

Mughal Period.—Much of the excellent work of Sher Shah was undone by the disorder and confusion which followed his death. It was Akbar (A.D. 1556—1605) who revived his revenue system and in doing so considerably improved upon the legacy of Sher Shah. After a few experiments which did not prove satisfactory, Akbar appointed Todar Mal as his Finance Minister in 1582 and a new era of revenue reforms began. Hitherto the practice was to fix the assessment every year on the basis of the yield of the soil and current prices. The State demand thus varied from year to year, causing great inconvenience. To obviate this difficulty, Todar Mal set up a "regulation" or standard system known as the *Zabti* assessment. According to it, lands were very accurately surveyed and for this purpose a stiff pole was substituted for the loose rope whose length fluctuated with the change of season. Lands were classified into four classes : (1) *Polaj* or land which was not allowed to remain fallow and was annually cultivated ; (2) Parauti or land occasionally left fallow to recuperate its productive strength ; (3) *Chachar* or land left fallow for three or four years ; and (4) *Banjar* or land remaining uncultivated for five years and more. The first two classes were subdivided into three grades according to their fertility and the average produce was calculated from the mean of the three grades. The demand of the State was fixed at one-third of the average yearly produce. Only the area actually under cultivation was assessed. The cash rates varied according to crops and were fixed on the average of ten years' actuals, that is from the past experience of ten years. The revenue was payable either in money or in kind according to differences in situation. This

regulation or *Zabti* system was *ryotwari*, that is, the settlement was made with the actual cultivators of the soil ; and it was applied to the Northern India.

The great merit of the Mughal revenue system lay in its scientific and just assessment. No farming of revenue was allowed and the fixity of the State demand gave the cultivators a certain amount of security.

Under the Mughal revenue system the rates of land revenue were uniform in the *subas* or provinces. No special information is available in the *Ain-i-Akbari* about the Ludhiana district in particular, as it was made up of several of the 33 *mahals* of the Sirhind *sarkar* or division, of which the whole land revenue was set down at Rs. 40,00,000 (16,07,90,540 *dams*). Tables are given in the *Ain-i-Akbari* of the rates collected on every crop during a period of 19 years from a *bigah* of *polaj* or cultivated land in each *suba*. Wheat paid generally from Re. 1 to 2 a *bigah* ; gram, etc., from 8 annas to Re. 1 ; *ponda* sugarcane from Rs. 4-8 to 5 ; other cane from Rs. 2 to 3 ; cotton from Rs. 1-8 to 3 ; pulses and millets (*moth, mung, jowar*, etc.,) from 4 annas to Re. 1. It was not to be expected that any more particular information as to the assessments paid by villages or tracts nearly four centuries ago would be forthcoming ; and, as the country was but partially under cultivation, and the present villages did not then exist at all or their limits have much changed since then, it would scarcely be of much use even if available.[1]

"It is impossible to say to what extent the system of Akbar was maintained by his successors ; but the administration of the revenue must have suffered in the general disorganisation of the government under the later emperors ; and in all parts it came to be a struggle between the collectors and the payers of revenue, the former trying to take as much, and the latter to give as little as they could. The custom of leasing a large tract of outlying territory to some person of importance, who paid a fixed sum annually, and made his own arrangement for collection (*mustajir* or *zamindar*) must have been recognised even in Akbar's time, for the western mahals of the district were always held by the Rais on these terms. The *Phulkian* and Maler Kotla chiefs, too, were originally lessees and held their territories subject to the payment of what was really an annual tribute. The *mustajir* was liable to pay the sum so fixed, but was otherwise independent; and it was only when he withheld payment that the imperial authorities interfered.[2]"

The *mustajir*, if his circle of villages was small, took a share of the produce from the cultivator, or sometimes cash rents on particular crops; but generally as he held a large tract, he sublet it in smaller circles to others who dealt direct with the cultivators. The eastern parts of the district were at first directly

1. Walker, T. Gordon, *Final Report on the Revision of Settlement of the Ludhiana District*, 1878-83, paras 183-84.

2. Ibid.

managed by the governor of Sirhind, because they were within easy reach, and assessment was fixed year by year for each village; but as the imperial authority weakened, and collections became more difficult, the system of leasing *tappas* or circles of villages spread. The principal *mustajir* or assignee in this district was the Rai of Raikot. The family began with a few villages, but gradually extended their boundaries, undertaking the revenue management (called *katkana*) of outlying circles of the villages as the governor of Sirhind lost control of them; till finally they held more than half of this,and a good part of the Ferozepore District. The Malaudh Sardars, like others of the Phulkian stock, had also a lease, and paid tribute to the emperor, taking a share of the produce from the husbandman. There were other *mustajirs* of less note, such as the Garewal Chaudharis of Raipur and Gujarwal, who had a small circle of villages, and paid revenue direct into the imperial treasury. The ability to realize the revenue has always been the test of power in the country, and, thus, as the imperial authority grew weaker, the *mustajirs* were less regular in their payments; while the village directly assessed would only pay when forced to.[3]

Sikh Period.—An account of the manner in which the country was partitioned on the disruption of the Mughal empire and the fall of the Sirhind (A.D. 1764) has already been given in Chapter II, History (pages 70—71). The western portions of the district were already in the possession of the Rais and of the Malaudh Sardars, who between them held the greater part of the Ludhiana and Jagraon tahsils; while Samrala and some of the western villages of Ludhiana, which had hitherto been under the direct revenue management of the governor of Sirhind, were seized on in groups by a number of petty Sikh chiefs from across the Satluj. The only difference that the change made to the Rais and to the Malaudh Sardars was that they ceased to pay tribute. The petty chiefs from the Manjha brought with them their system, if such it may be called, of revenue; and when in A.D. 1806-09, Maharaja Ranjit Singh extended his territories to this side of the river, annexing all the country held by the Rais, and absorbing several of the petty chiefs, this may be said to have been introduced all over the district. Ranjit Singh divided his conquest between himself and the Kapurthala, Ladwa, Nabha and Jind chiefs in the manner described in Chapter II, History (pages 72—75). The greater part was either retained by himself or given to the first of these. The expression 'system of revenue' has

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3. *Ibid.*

As an illustration, the following incident that took place about 1740 A.D. may be recounted. The Rai (Kalha) was not paying up his revenue regularly, and informed the *usba* or governor of Sirhind that he could not realize it from the villages. This was reported at Delhi, and Ali Muhammad Rohilla was sent to bring the people to order. He marched out of Ludhiana towards J ıgraon, putting to death *lambardars* here and there by way of example ; but he soon found that it was the Rai himself who had created the difficulty and incited the people to withhold payments. Ali Muhammad then turned on the Rai, and, with the assistance of the Phulkians, chased him out of the country. (*Ibid*)

been used above, but it may be said of the then rulers, whether in the Punjab proper or in the Malwa, that their system was to exact as much from the cultivator as was possible without making him throw up his land. The chiefs, great and small, tried to get what they could out of the peasantry; and the only restraining influence was the fear of losing the revenue-payers. Land was then plentiful and cultivators scarce, so that there was the danger of a chief driving away his villagers into the territories of a neighbour who was not quite so bad. In effect the chiefs were landlords who exacted from their tenants the utmost that they could without driving them away. There was a strong feeling on the part of the peasantry that they had right to cultivate the land, and it was only the most extreme tyranny that would separate them from it but on the other hand the demands of the chief on the produce were limited solely by his own discretion[4].

Maharaja Ranjit Singh leased the territory reserved for himself in circles of villages, the lessees being changed from time to time. Thus the family of the Lahore *Vakils*[5] held the *pargana* of Sahnewal, paying Rs. 1,00,000 per annum for it; and Jamadar Khushal Singh held about 150 villages in different places. These lessees made their own arrangements with the villages year by year generally taking care to leave a margin of about one-fourth as profit on what they paid into the Lahore treasury. For some villages a cash demand was fixed, in others a share of the produce was taken or the cash value of the Government share was determined by appraisement. The Kapurthala (Ahluwalia) chief had a large tract of country on this side of the river, nearly the whole of the Jagraon tahsil; and the method of fixing the assessment in his possession may be taken as a sample and appears to have been as follows: The Tahsildar went from village to village every year, and first made an offer to the *lambardars* of the assessment at a certain sum for that year (this method being known as *mushakhasal*). This was often accepted; but if not, a valuation of the Government share of the produce for the year was made by a committee selected from the respectable *lambardars* of the neighbourhood. For the *Rabi* harvest, an appraisement (*Kun*) of the value of the yield from each field was made when crop was ripe; and for the *Kharif*, fixed cash rates were generally applied. The resulting assessment for the year was seldom in full, notwithstanding the free use of the various recognized methods of torture; and large balances were generally allowed to accrue. The lesser Sikh chiefs took a share of the produce in the *Rabi*, and cash revenue according to certain rates for the *Kharif* crop. They were really "*Zamindars*" in the Bengal sense of the word and would assert that the land of the two or three villages that they held belonged to them. The rates paid by the cultivators on the *zabti* crops were

4. *Ibid.*, para 185.

5. The members of the well known Bhandari family of Batala, notably Rai Kishan Chand, who functioned as Vakil at Ludhiana for a long time.

as shown below. These rates were fixed for a *kachcha bigah* or *ghumaon*, which varied a good deal throughout the district, each chief having his own standard. The *kachcha bigha* has been taken at one-third of the Government standard, as this was about the average.[6]'

Crop		*Rate per acre*
		Rs. a Rs. a
Cane	..	14—0 to 20—0
Maize, cotton	..	7—0 to 10—0
Charri, moth, etc.,	..	1—4 to 3—4
Carrots and other vegetables, poppy etc.,	..	5—0 (fixed)

The rate at which the chief realized his share of the produce was generally one-third of the grain and one-forth of the chaff. The share of the grain was as high as half. The Rais are said to have only taken one-fourth of grain, and their rule continued for a long time afterwards to be spoken of with regret. One would have thought that with rates fixed so high the peasant would have little left for his maintenance; but besides the regular revenue there were the usual dues in cash or in kind, paid to the chief or to the harpies who represented him in his dealings with the people. It was impossible that the cultivator should pay out of his produce all that he was supposed to; and his main resource was pilfering from the field or grain heap before division. The saying *bataie lutaie* applied with equal effect to both parties. There were about a dozen dues levied in cash under some pretence or other; and, if added to this that the chief quartered his men and horse on the villagers, and that the latter had to contribute their labour gratis whenever called upon to do so, it may be imagined that the lot of the husbandman was not a happy one, and that he could scarcley call his life his own.[7]

Modern Period:—

British Settlement of Villages that Lapsed in 1835.—"In 1835 the British acquired, in the manner described in Chapter II, History (pages 76.),

6. *Ibid.*, para 186.

7. *Ibid.*

a small portion of territory around Ludhiana and Bassian. In all it comprised 74 villages. These were managed in much the same way as the surrounding territory under the native chiefs for four years. Then a summary cash assessment was fixed for three years. Finally in 1842 a settlement was made for twenty years, apparently by the Assistant Political Officers, Captain Mills, and Messrs Vansittart and Edgeworth. There is no English report of this settlement, which was probably more or less a regular one on the model of those of the North-Western Provinces; and from para 71 of Mr. Davidsons' report (written in 1853)[8] it appears that none was submitted. A complete vernacular record with maps was made out; but this was revised when the rest of the district came under settlement in 1850, and the assessments of 1842 were at the same time reduced where necessary, enhancements being deferred till the expiry of the full term of the original settlement. Seventy one villages, which had paid Rs. 75,680 in 1842 had their assessment reduced to Rs. 74.893. Three villages were not assessed in 1842, because these were held revenue-free. The assessment of 1842, thus differs but slightly from that fixed after revision.[9]

Summary Assessments, 1847—49.—The rest of the district came under the British after the Satluj campaign of 1845-46, and a summary assessment was fixed by the first Deputy Commissioner, Captian Larkins, who held charge from 1846 to 1849, Sir G. Campbell, who succeeded him, completing such work as remained to be done. The only guide for the assessing officer was the amount collected from each village by the predecessors of the British; as this was ascertained, so far as possible, for a period of 5 years from the old papers, statements of leading men, etc. A very liberal deduction was made from the results arrived at in favour of the people, the amount varying from three to six annas in the rupee. The *jagir* villages were excluded from these operations, and the *jagirdars* were allowed to continue their collections as before till after the annexation of the Punjab in 1849, when it was decided that a cash demand should be offered to all villages alike. The assessments of the Summary Settlement were accepted readily; and, considering the date on which they were founded, worked wonderfully. A few villages became disorganized, probably owing to the change of system, and reductions had to be made here and there; but the people welcomed a fixed demand. The best way of forming an idea of the fairness of the summary assessment as a whole is to observe the extent to which it was necessary a few years after to revise it in the Regular Settlement[10].

8. *Report on the Revised Settlement of the District of Ludhiana in the Cis-Sutlej-States*, effected by H. Davidson and other officers, under the direction of G.C. Barnes, Commissioner and Superintendent (Lahore, 1859).

9. *Ibid.*, para 187.

10. *Ibid.*, para 188.

The following statement shows the final result of the new assessment:[11]

Tehsil		Assessment: Summary or Jagirdars' estimates	Assessment: Regular	Decrease per cent
		Rs.	Rs.	
Pakhowal	..	2,88,141	2,55,959	11
Jagraon	..	1,74,334	1,68,383	3
Ludhiana	..	2,46,786	2,42,150	2
Samrala	..	2,36,338	2,59,108	20
Total	..	10,45,599	9,25,600	11

Regular Settlement of 1850.—"The Regular Settlement operations commenced in 1850 and the assessments were announced between 1850 and 1853. They were framed under the regulations of the time and the instructions of the North-Western Provinces Board of Revenue, embodied in the "Directions to Settlement Officers". The edition of this publication then in force lays down the rule "that the Government should not demand more than two-thirds of what may be expected to be the net produce to the proprietor during the term of Settlement, leaving to the proprietor one-third as his profits and to cover the cost of collection."

"In paras 40 and 41 of his report, Mr. Davidson has given an account of how his calculations were worked out. There was a very elaborate classification of soils, each tahsil was considered by parganas (of which there were 19), and the villages of each *pargana* were divided into three classes according to quality. In each class of village, the rent for every crop and soil was calculated; in the case of the *kharif* cash rents (*zabti*), which were actually in use for the principal crops and had been taken by the predecessors of the British, giving the necessary data. For crops on which the rent was ordinarily taken in kind a rate of yield as ascertained from experiment and enquiry was assumed, the proprietor's share calculated at the prevailing rate of rent in kind, and the value of this worked out at the average of the prices current for ten years. The rental of each village was the total of the rents of each crop and soil. For the Kharif harvest the rental calculated was very little if at all. The rates assumed did not vary much from *pargana* to *pargana*, and there were the old Sikh *zabti* rates to go on besides existing cash rates of rent; the estimates of yield were much

11. *Ibid.*

less reliable. As a rule the irrigated rates were much too low; and, although the cultivation might have improved, it could not have done so to the extent that a comparison of the papers of the revised with those of the Regular Settlement would indicate. The rate adopted as proprietor's share was one-third of the gross produce in the uplands and two-fifths in the *Bet*; and of this rental two-thirds was taken as the share of Government, that is, as the revenue rate juma.[12]"

The Commissioner, Mr. Barnes, arbitrarily reduced the assessment in many of the finest villages, and left a legacy of timid assessment[13].

First Revised Settlement, 1878—1883[14].—The first revised settlement was begun by Gordon Walker in 1878 and completed in 1883. This was the first occasion on which a new assessment was introduced at once in all villages of the distrct. The demand was a fair one in Samrala tahsil, was lenient in Ludhiana, and was exceedingly unfavourable to Government in Jagraon. It gave an increase of 18 per cent in Samrala, 19 per cent in Ludhiana, 16 per cent in Jagraon, and 18 per cent throughout the district. The distribution over villages was most carefully done, but Gordon Walker laboured under the disadvantage of having no statistics of matured crops, nor did he make any use of crop rates on sown areas. In consequence, there was a good deal of inequality of incidence on harvested areas, the incidence was nowhere severe and the inequalities only showed how much higher the general pitch of the demand might have been.

The demand, when first introduced, amounted to Rs. 11,12,697. It replaced an assessment which was itself lenient and had worked for thirty years with the utmost success. Revision of assessment was held to be justified by an immense rise in prices, by a considerable increase in resources, and by the superior wealth and comfort of the people. In addition, the district was on the eve of the introduction of widespread canal irrigation.

The new assessment was based on produce estimates. Cash rents were used only to check the revenue rates arrived at from produce calculations. It is to the almost exclusive use of produce estimates that the assessment owes its very lenient character. The crop areas were those obtained by

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12. *Ibid*, paras 189-93.

13. Junnett, J.M., *Final Report of the Second Revision Settlement*, 1908-1911, *of the Ludhiana District*, p.5.

14. *Ibid*. pp. 4-5, 15-17 ;

T. Gordon Walker, *First Revised Settlement Report of the Ludhiana District*, 1878-1883;

Ludhiana District Gazetteer, Pt. A, 1904, pp. 185-211.

observing the harvests of two years (*rabi* 1879 to *kharif* 1880), which were not themselves representative. The September rains of 1879 were only a quarter of the average; those of 1880 were a complete failure. The *kharif* rains of both years were much below average, and there were no winter rains altogether. The yields assumed (and applied to sown, not to matured areas) were cautious, and led the Government of India to remark that "the average rates of produce are considerably lower than might have been expected from the style of cultivation described in the report." The rent rates kept very close to the arithmetical averages of the rents found to prevail (from which abnormal rents were not excluded), and liberal deductions were allowed on account of payments made to menials. No account was taken of the share of the straw realised by proprietors.

In spite of the high proportion of the estimated half net assets which was taken, the demand was very lenient. An all-round incidence of Re. 1-7-5 per acre sown was very light for so fertile and secure a district. Obviously the great rise in prices did not at all affect the assessment in Jagraon and very little in other tahsils.

The leniency of the assessment would have been of small consequence if it had been equally marked in all tahsils. But unfortunately the demand was fair in Samrala, very moderate in Ludhiana, and exceedingly timid in Jagraon. The inequality was fully appreciated by the people, and remained the cause of some soreness in Samrala.

The inequality became even more marked since the last settlement. Canal irrigation has been introduced, not into Samrala, but into the most prosperous and most lightly-assessed tracts, being perennial in the wealthiest and least taxed tract of all, namely, the Upper Dhaia of Jagraon.

Second Revised Settlement, 1908--1911.—The settlement operations were started in 1908 and completed in 1911. The forecast report was prepared in the summer of 1908. The prices were found to have risen by 45 per cent since the last settlement of 1879—83. It was decided to enhance the demand by Rs. 2½ lakhs and limit the total increase to 33 per cent.

In all the three tahsils of **the** district, the natural division: Bet, Lower Dhaia, and Upper Dhaia formed the basis of the assessment circles. In Samrala and Jagraon tahsils these natural divisions formed suitable assessment circles, but in Ludhiana it was necessary to divide the Bet into the Eastern and the Western Bet, to form the majority of the outlying villages (Jungle) into a separate circle, and to retain the old Powadh circle in the extreme south-east

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15. Junnett, J.M., *Final Report of the Second Revised Settlement*, 1908-1911, *of the Ludhiana District*, pp. 17-21, 26-28.

of the Upper Dhaia. Thus Samrala and Jagraon tahsils each formed three assessment circles, viz., Bet, Lower Dhaia and Upper Dhaia, while the Ludhiana tahsil was split up into six assessment circles, viz., Eastern Bet, Western Bet, Lower Dhaia, Upper Dhaia, Jungle and Powadh.

The first tahsil to be brought under assessment was Samrala. The inequality of the then existing assessment in the three tahsils was not fully known, and Samrala tahsil was treated on its own merits. The expiring demand was Rs. 3,12,704. The new demand introduced was Rs. 3,81,286, falling Rs. 2-7-9 per acre cultivated and Rs. 2-6-6- per acre of mature crops.

The assessment of Jagraon tahsil was probably the most serious problem which had to be faced in the settlement. The expiring demand of Rs. 2,79,733 was recognised on all hands to be exceedingly lenient, and the advent of canal irrigation had worked a revolutionary change in the condition of the tract. The people enjoyed many exceptional advantages and were notably prosperous. The new assessment was fixed at Rs. 4,60,562, giving an incidence of Re. 1-15-6 per acre cultivated and Re. 1-14-1 per acre of matured crops.

In Ludhiana tahsil, the expiring demand was Rs. 5,13,545. The new demand was fixed at Rs. 6,58,124, falling at Re. 1-14-1 per acre cultivated and Re. 1-15-7 per acre of matured cops.

On the basis of the anticipated increase of Rs. 2½ lakhs in the demand for the district as a whole, upto the limit of 33 per cent, the actual demand was raised from Rs. 11,05,352 to Rs. 14,99,972, or by Rs. 3,94,620. Though financialy successful, the re-assessment did not solve all the problems it had to deal with. It failed to correct the already existing great inequalities in assessment. Samrala was fairly fully assessed. In Jagraon, a too lenient assessment was enhanced as far as it was possible at the time. But Ludhiana tahsil, especially in the richest and most progressive circles, got off much too lightly. In making proposals for that tahsil, the Settlement Officer was hampered by the necessity for keeping down the total increase throughout the district, and by the feeling that the incidence of the demand should be midway between those of Samrala and Jagraon tahsils. The hard-and-fast rule of a 33 per cent limit prevented any correction of his proposals. The demand was nowhere so heavy as to affect the prosperity of the people, but the Government, while securing for itself more than it expected, left the lightest burdens on the strongest shoulders.

The assessments imposed at the various settlements of Ludhiana district are given below in a comparative form:

		(*Rs.*)
Summary Settlement, 1842	..	10,75,000 (rough, exact figures not available)

		Rs.
Regular Settlement, 1850—53	..	9,62,541
First Revised Settlement, 1879—83	..	11,12,697
Second Revised Settlement, 1908—11	..	14,99,572

Although the 30 years term fixed for the settlement has expired, it still continues to be in force. The incidence of land revenue imposed for the district as a whole, under the Second Revised Settlement, 1908—11, is as under:

Incidence per acre of cultivated area	Incidence per acre of matured crops
(Rs.) 2-0-8	(Rs.) 2-0-7

The incidence of land revenue, per acre, in the district from 1948-49 to 1965-66 is given below:

Year		*Incidence of Land Revenue per acre on assessed area*	
		for cultivated area	for total area
		Rs. As. Ps.	Rs. As. Ps.
1948-49	..	2-5-7	1-14-9
1949-50	..	2-11-1	2-2-9
1950-51	..	2-10-6	1-15-0
1951-52	..	2-10-0	2-0-0
1952-53	..	2-9-6	1-14-6
1953-54	..	2-9-0	1-14-0
1954-55	..	2-8-6	2-0-6
1955-56	..	2-8-0	2-2-10
		Rs.P.	*Rs. P.*
1956-57	..	2·14	1·76

Year		Incidence of Land Revenue per acre on assessed area — for cultivated area	
			for total area
		Rs. P.	Rs. P.
1957-58	..	2·37	1·76
1958-59	..	2·33	1·98
1959-60	..	2·25	1·96
1960-61	..	2·27	1·98
1961-62	..	2·26	1·97
1962-63	..	2·25	1·96
1963-64	..	2·02	1·64
1964-65	..	2·27	1·82
1965-66	..	2·19	1·82

(*Source* : Deputy Commissioner, Ludhiana)

The thirty years term of the settlement of 1908—11 expired on 1939-40, but no fresh settlement has been undertaken. Meanwhile there has been great rise in prices of agricultural products. The area under cultivation has also increased. Therefore, in addition to the assessed demand of land revenue of 1908—11, Surcharge, Special Assessment, Special Charge and Additional Charge are being levied in accordance with the Punjab Land Revenue (Surcharge) Act, 1954, the Punjab Land Revenue (Special Assessment) Act, 1956, the Punjab Land Revenue (Special Charges) Act, 1958, and the Punjab Land Revenue (Additional Charges) Act, 1960. The charges levied under these Acts are detailed below:

The Punjab Land Revenue (Surcharge) Act, 1954.—No fresh settlement could be undertaken after the expiry of the 30 years term of the Second Revised Settlement of 1908—11. Meanwhile, Government expenditure had vastly increased, particularly since the Independence, on account of expansion of Government establishment and introduction of various development plans. To meet this ever-growing demand, the State Government tapped the different sources of revenue. As regards land revenue, the Punjab Land Revenue (Surcharge) Act, 1954, (Punjab Act XXXVI of 1954)[16], was passed. Under this Act, the following rates of assessment are levied:—

(i) 25 per cent of the land revenue paid when it is more than Rs. 10 but less than Rs. 30, and

(ii) 40 per cent of the land revenue paid when it is more than Rs. 30.

[16]. This Act was published in the Punjab Government Gazette Extraordinary with Punjab Government notification No. 93-Leg/54, dated the 14th December, 1954.

The levy has been charged from the *rabi* harvest of the agricultural year 1953-54.

The Punjab Land Revenue (Special Assessment) Act, 1956 (Punjab Act 6 of 1956).—When land is used for purposes of agriculture, the return to the State is fixed under the land revenue settlements, having regard to factors such as soil, yields, prices, rainfall, rental statistics, economic conditions of the area, etc. But when land is put to non-agricultural uses like construction of a residential building or erection of an industrial plant, the owner of the land gets an unearned increment particularly within or in the vicinity of growing towns and cities. This increment in land values can generally be attributed mostly to the expenditure incurred out of public revenues in the shape of provision of roads, construction of railways and general development of the area. The land-owners are not entitled to this increment in values and it is only fair that this increment should be utilised as a source of revenue by the Government.

It was with this object that the Punjab Land Revenue Act of 1887 was amended by the Punjab Act No. XIII of 1952, which provided for special assessment of land "put to use different from that for which an assessment is in force or when the land has been put to use for non-agricultural purposes, such as brick-kilns, factories, houses, landing grounds and other similar purposes". The work of special assessment of non-agricultural lands was started in July, 1955.

Since a very elaborate procedure was provided for carrying out the special assessment operations which were to take a number of years, it was decided to levy special assessment on *ad hoc* basis as a multiple of the existing land revenue with effect from *kharif* 1955, under the Punjab Land Revenue (Special Assessment) Act, 1956 (Punjab Act 6 of 1956).

While the work of special assessment was in progress a defect was observed in the Punjab Land Revenue (Amendment) Act, 1952 (Punjab Act XIII of 1952) inasmuch as it did not permit the levy of special assessment on land put to non-agricultural use if it was not already assessed to land revenue. In other words, the town sites escaped assessment. Accordingly, the Punjab Land Revenue (Amendment) Act, 1958 (Punjab Act IX of 1958) was passed to provide assessment of lands whether or not already assessed to land revenue, except village *abadi deh*, and making certain exemptions.

The special assessment, also called Marla Tax, was abolished with effect from *kharif* 1964. The arrears due upto that period were, however, to be recovered.

The Punjab Land Revenue (Special Charges) Act, 1958.—In consequence of the heavy financial burden on the State caused by the Five-Year Plans, it became necessary to further augment the State revenues. The sucharge on land revenue levied in 1954 was found to be inadequate. Accordingly, a special charge on land revenue was levied from the *rabi* harvest of the Agricultural year 1957-58, under the Punjab Land Revenue (Special Charges) Act, 1958 (Punjab Act 6 of 1958). Under this Act, land revenue includes the surcharge leviable under the Punjab Land Revenue (Surcharge) Act, 1954. Every land-owner who pays land revenue in excess of Rs. 50, is to pay a special charge thereon in accordance with the rates specified in the special schedule given in the Appendix at page 480.

The Punjab Land Revenue (Additional Surcharge) Act, 1960 (Punjab Act No. 38 of 1960).—The Act provided for the levy and collection, only once, of additional surcharge on land revenue, at the rate of 50 per cent of land revenue, for the two successive harvests of *kharif* and *rabi* of the agricultural year 1961-62, as notified by the State Government, *vide* No. 1192-SM(IV)-61/924, dated the 28th March, 1961.

For levy of this additional surcharge, land revenue was to be exclusive of surcharge, special assessment and special charge payable under the Punjab Land Revenue (Surcharge) Act, 1954, the Punjab Land Revenue (Special Assessment) Act, 1956, and the Punjab Land Revenue (Special Charges) Act, 1958, respectively.

The demand of land revenue, inclusive of the above mentioned additional charges, in Ludhiana district for the year 1965-66, was as under :

	Khalsa	Muafi	Jagir	Total
	Rs.	Rs.	Rs.	Rs.
Fixed Land Revenue ..	14,81,872	4,861	29,848	15,16,581
Fluctuating ..	5,619	—	—	5,619
Surcharge ..	3,32,383	—	—	3,32,383
Special Assessment ..	1,74,201	—	—	1,74,201
Special Charge ..	95,634	—	—	95,634
Total ..	20,89,709	4,681	29,848	21,24,418

(*Source* : Deputy Commissioner, Ludhiana.)

Jagirs and Muafis.—More than 1/6th of the total revenue stood assigned by way of *jagirs* and *muafis*, etc., at the time of the Second Revised Settlement, 1908–11. There were 502 petty *muafis* of the value of Rs. 16,134. After the Punjab partition of 1947, during the year 1947-48, the assignment by way of *jagirs* stood at Rs. 2,36,777 and *muafis* at Rs. 37,364. Under the Punjab Resumption of Jagirs Act, 1957 (Punjab Act 39 of 1957), all the *jagirs*, except War Jagirs, Military Jagirs and certain religious *jagirs*, have been resumed. Similarly, the *muafis* for the religious institutions alone have been left. As a result thereof, the assignment has gone down by way of *jagirs* to Rs. 27,863 and *muafis* to Rs. 4,861.

Land Tenures.—The prevailing form of tenure at the time of the Second Revised Settlement, 1908—11, was incomplete *pattidari*. In some villages several lands were held according to possession and the revenue was paid in the same way, but the interest in common-land was usually defined by

ancestral plough on which the original division had taken placo and the same shares were in use for the disposal of the property of the heirless owners and the village *malbah*. As a general rule, the people had small holdings. Only a few Jagirdars had *zamindari* villages. The number of such villages was 23, of which 16 were along the river side.

The position of tenures has since considerably changed. Incomplete *pattidari* has changed into *bhayachara* tenure. In the *zamindari* villages, too, with the death of sole owner, the estate becomes communal *zamindari* when several sons inherit the estate. When the land is subsequently partitioned between the brothers, incomplete *pattidari* comes into being. Further changes by way of possession, improvement made in the land by individuals, sales, mortgages, etc., lead to *bhayachara* tenure. At present, the *zamindari* estate is practically extinct. The *pattidari* estate has been replaced by *bhayachara*, and, if any re-assessment is made, the demand will have to be created over the holdings, i.e., the respective areas of cultivated land in possession of different individuals, and not in accordance with their ancestral or customary shares.

As mentioned above, the people have got small holdings and, as such, they cultivate their lands themselves, by way of '*khud-kasht*'. If land is given for cultivation to tenants, usually 1/3rd share of the produce is received by the owner. Cash rents are also being received by the owners near Ludhiana City and other towns in the district. However, before the enactment of the Punjab Security of Land Tenures Act, 1953 (Punjab Act X of 1953) the usual share received by owner was one half. There was also small percentage of occupancy tenants and inferior owners, i.e., *Adna Maliks*, having their land under the superior proprietors, i.e., *Ala Maliks*. The Punjab Occupancy Tenants (Vesting of Proprietary Rights) Act, 1953 (Punjab Act VIII of 1953), has improved the status of occupancy tenants by vesting in them proprietary rights and, thus, making them full-fledged owners. The Act has also provided for payment of compensation to the superior proprietors whose rights are extinguished. Similarly, the Punjab Abolition of *Ala Malikiyat* and *Talukdari* Rights Act, 1952 (Punjab Act IX of 1953), has conferred full proprietary rights on inferior proprietors, i.e., *Adna Maliks*, in land held by them.

(ii) **Collection of Land Revenue.**—The revenue collection is the responsibility of the lambardar (village headman). At the time of the First Revised Settlement, 1878—83, the total number of lambardars in the district was 2,747, and the average remuneration per annum amounted to Rs. 20. At the time of the Second Revised Settlement, 1908—11, the number of lambardars was 2,657 (i.e., 90 less than at the settlement of 1878—83) and the average remuneration of each was Rs. 28 per annum. These appointments dated from the Regular Settlement of 1850. Previously the lambardars

were a strong body, well paid and selected as really leading members of the agricultural class ; but in the detailed inquiry which was then made into village constitution, their number was more than doubled. The authority of the Lambardars has since progressively diminished. [17]

Usually there is one lambardar for each *patti,* and in the larger villages there is often one for each *thulla.*[18] The number of lambardars in the district in 1965-66 was 2,803.

The *zaildari* system was a creation of the First Revised Settlement, 1878—83. The original *zaildars* were *zamindars* who had been employed during settlement as unofficial assistants, and their *zails* were formed by giving each a number of villages round his home on payment at one per cent of the revenue demand which might be sufficient to yield an annual remuneration of about Rs. 200. [19]

During the Second Revised Settlement, 1908—11, new arrangements were made which involved the minimum of charge. The *zails* were reduced from 55 to 53. Out of old *zails,* 19 lay in more than one *thana,* and one or two were of very inconvenient shape. The new zails were each in a single *thana,* and were convenient in shape and tribal constitution. The *zaildars* were graded. One-fourth, the best men, were to draw Rs. 300 per annum, a half Rs. 225, and the rest Rs. 175. [20]

In addition to the *zaildars, sufedposhes* were appointed at the First Revised Settlement, 1878—83. Their appointment was a compromise between the *ala-lambardari* system and the appointment of assistant *zaildars.* They numbered 117 and were intended to be appointed from among the lambardars of the villages with three or more headmen. Their annual pay was Rs. 30, Rs. 25, or Rs. 20, and the average was Rs. 23. This system proved a failure, and was swept away at the time of the Second Revised Settlement, 1908—11. In its place, 52 *sufedposhes,* practically one for each *zail,* were appointed. They were to be recruited in the same way as *zaildars,* were to

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17. Gordon Walker, *Final Report on the Revision of Settlement of the Ludhiana District,* 1878-83, p. 81.

J.M. Dunnett, *Final Report of the Second Revised Settlement,* 1908-1911, *of the Ludhiana District,* pp. 33-34.

18. The sub-divisions of villages are *tarafs* in some of the larger villages, *pattis* in most ; and inside of these *thullas. Patti* is a major sub-division of a village and *thulla* a smaller sub-division.

19. T. Gordon Walker, *Final Report on the Revision of Settlement of the Ludhiana District,* 1878-83, pp. 274-79.

J.M. Dunnett, *Final Report of the Second Revised Settlement,* 1908-11, *of the Ludhiana District,* p. 33.

20. *Ibid.*

draw Rs. 60 per annum, and were to be encouraged to look on themselves, and to work, as *naib-zaildars*, The original appointments were made from the old *sufedposhes* in order to reduce the change to the minimum.[21]

This was the system outside the big *jagirs*. In the Ladhran, Malaudh, Pakhoke and Bet Jagirs no *zaildars* were appointed at the First Revised Settlement, 1878—83; but numerous *sufedposhes* were entertained who proved as unfit as their brethren in Khalsa villages. During the Second Revised Settlement, 1908—11, the introduction of the name and office of *zaildar* in these jagirs was considered inadvisable. In their place, *sufedposhes* were appointed. They were to do all the work a *zaildar* would do in certain groups of jagir villages, and was to receive remuneration varying from Rs. 80 to Rs. 100 per annum.[22]

The *Zaildars* and *Sufedposhes* were paid from a portion, usually 1 per cent, of land revenue, which was set aside for the purpose. This has, however, been stopped with the abolition of *zaildari* and *sufedposhes* institutions.

Till 1948, the agencies of *zaildari* and *sufedposhi inams* continued to supervise and assist in the collection of land revenue. These old institutions were abolished in 1948, revived in 1950, and were again abolished in 1952.

Now only lambardars are responsible for the revenue collection on payment of *pachotra*, a cess charged at the rate of 5 per cent of the land revenue. In case the lambardar is unable to collect the land revenue, he makes a written complaint to the Tahsildar who helps him in effecting recovery.

Along with the land revenue, the lambardar also collects *abiana* and water advantage rate, for which he is paid 3 per cent and 5 per cent, respectively, as collection charges.

Lambardars are authorised to remit land revenue by post ; but the system is not very popular because majority of them generally find it more convenient and economical to visit the tahsil headquarters personally for crediting the land revenue in the tahsil treasury than sending it by money order.

(iii) **Organisation for Purposes of Land Administration.**—For purposes of revenue management, the State is divided into various districts, each in the charge of a Deputy Commissioner, also known as Collector, indicating his responsibility for the realisation of all Government revenues. The district is divided into a number of tahsils to each of which a Tahsildar and a Naib-Tahsildar, according to the work load, are appointed. The position of a Naib-Tahsildar with reference to the Tahsildar is that of the former Revenue Assistant or present Sub-Divisional Officer vis-a-vis a Deputy Commissioner.

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[21] *Ibid.*

[22] *Ibid.*

Tahsildars and Naib-Tahsildars exercise administrative and revenue judicial functions within their jurisdiction.

The unit of revenue administration is an estate which is usually indentical with the village. Of these estates, large and small, a tahsil, as a rule, contains two to five hundred. Each of them is separately assessed to land revenue and has a separate record-of-rights and register of fiscal and agricultural statistics, which the Tahsildar maintains. All its proprietors are jointly responsible for the payment of land revenue, and in their dealings with Government they are represented by one or more Headmen or Lambardars. These Headmen are paid by the communities they represent, by a surcharge of 5 per cent on the revenue. Together they form a valuable unofficial channel through which the Deputy Commissioner and the Tahsildar convey the orders of the Government to the people and secure compliance. There is also an official chain connecting the village with the tahsil. Estates are grouped into small circles to each of which a Patwari is appointed. About 20 of these circles form the charge of a Kanungo whose duty is to supervise the work of Patwaris.

Accordingly the district has been sub-divided into tahsils, *kanungo* circles and *patwar* circles as follows :—

Tahsil	Kanungo Circles	Patwar Circles	Assistant Patwar Circles
Ludhiana ..	1. Ludhiana ..	18	2
	2. Kum Kalan ..	18	
	3. Dakha ..	19	
	4. Gil ..	22	
	5. Maloudh ..	19	
	6. Raipur ..	20	
	7. Pakhowal ..	19	
	8. Payal ..	11	
	9. Jarg ..	13	
	Total ..	159	
Samrala ..	10. Samrala ..	24	1
	11. Machhiwara ..	25	
	12. Khanna ..	16	
	13. Khamanon Kalan ..	16	
	Total ..	81	

Tahsil	Kanungo Circle		Patwar Circles	Assistant Patwar Circles
Jagraon	.. 14. Jagraon	..	19	1
	15. Raikot	..	23	
	16. Manoke	..	23	
	17. Sawaddi	..	19	
	Total	..	84	
Ludhiana District	17	..	324	4

(*Source* : Deputy Commissioner, Ludhiana.)

The staff employed for revenue work in the different tahsils of the district, as on March 31, 1966, was as under :

Tahsil		No. of Tahsildar	No. of Naib-Tahsildar	No. of Office Kanungos	No. of Kanungos	No. of Patwaris	No. of Assistant Patwaris
Ludhiana	..	1	3	1	7	135	2
Jagraon	..	1	2	1	4	84	1
Samrala	..	1	2	1	4	81	1
Payal (Sub-Tahsil)	..	—	1	—	2	24	—
Total	..	3	8	3	17	324	4

(*Source* ; Deputy Commissioner, Ludhiana)

A Collector is the steward of the district and is bound to respect and preserve from encroachment every private right in the soil which has been created or confirmed by the State. Where the revenue has been fixed for a term only, he is not only to collect it but also to look forward to a time when it will be revised and hence he is to record, in a systematic manner, statistical information which will facilitate its equitable re-assessment. He must ensure and assist measures to prevent the loss of crops from causes which are in any degree controlable by man. He must encourage and assist every effort made by a right holder for the development of his estate. In his duties, a collector is assisted by Sub-Divisional Officers, one each for the three Sub-Divisions in the district, viz., Ludhiana, Jagraon and Samrala. The post of Revenue Assistant, first created in 1883, has since been abolished ; and his duties have been assigned to the Sub-Divisional Officers in respect of their areas.

Tahsildar, an important functionary, is in charge of a tahsil. The duties of a Tahsildar within his tahsil are almost as manifold as those of a Collector within his district. He has to control the *patwar* and *kanungo* agency, to collect revenue punctually, to point out promptly to the Collector any failure of crops or seasonal calamity which renders suspension or remission necessary and to carry out within his own sphere the other duties connected with land revenue administration. He is a touring officer and his tours afford him ample opportunities to deal, on the spot, with partition cases and other matters connected with appointment of lambardars, lapses of land revenue assignments, etc.

Tahsildar is assisted by Naib-Tahsildars of which, in the year 1966, there were 8 in the district—3 in tahsil Ludhiana, 1 in Sub-tahsil Payal, and two each in tahsils Samrala and Jagraon.

The Patwari is an inheritance from the village system of old days. Under section 3 of the Land Revenue Act, 1887, Patwari was a 'Village Officer' and was paid from the village officers' cess, but in 1906 (*vide* Punjab Government, Department of Revenue and Agriculture/Revenue notification Nos. 268 and 269 dated November 22, 1906) the liability of the land-owners for payment of *patwar* staff was abolished.

A Patwari is appointed for a circle consisting of one or more villages. Besides the proper upkeep of records entrusted to his charge, a Patwari is required to report to the Tahsildar any calamity affecting land, crops, cattle or the agricultural classes, and to bring to his notice alluvial and diluvial action of rivers, encroachments on Government lands, the death of revenue assignees and pensioners, progress of works made under the Agricultural Loans and similar laws, and the emigration or immigration of cultivators. He undertakes surveys and field inspections, aids in other government activities like distribution of relief, etc., prepares the *dhalbachh* papers showing the demand due from each land-owner to the village *bachh*. When revenue collections are in progress, he must furnish any information that may be required to facilitate the collections. He himself is not permitted to take any part in the collection of the revenue excep when any lambardar refuses to accept the *dhal bachh* and no immediate alternative arrangement can be made.

Patwari is under the immediate supervision of a circle supervisor known as Kanungo, the title of the old Muhammadan functionary having been retained. The Kanungo establishment consists of 17 Kanungos, 3 Office Kanungos, a Sadar Kanungo and a Naib-Sadar Kanungo. The Kanungo is responsible for the conduct and work of Patwaris under his charge. He should constantly move about in his circle, supervising the work of Patwaris, except in the month of September when he stays at tahsil headquarters to check *jamabandis* received from the Patwaris.

The Office Kanungo is Tahsildar's revenue Clerk. His chief work is the maintenance of the statistical revenue records. He has also the charge of the forms and stationery required by the Patwaris, keeps the account of mutation fee, records the rainfall and maintains the register of assignees of land-revenue and other miscellaneous revenue registers. He is the custodian of all the records received from Patwaris and a well-ordered Kanungo's office is an important factor in the revenue management of a tahsil.

At district headquarters, there is a District or Sadar Kanungo assisted by a Naib-Sadar Kanungo. The Sadar Kanungo is responsible for the efficiency of both the Office Kanungos and the Kanungos, and should be in camp inspecting their work for at least 15 days in every month from October to April. He is the keeper of all records received from Kanungos and Patwaris and maintains, with the help of his assistant, copies of the prescribed statistical registers for each assessment circle, tahsil and the whole district. The responsibility of Tahsildars and Naib-Tahsildars for the inspection and correctness of the work of the Kanungos and the Patwaris is, however, not affected by the duties of the Sadar Kanungo. The Kanungos are supervised by the Tahsildar and the Naib-Tahsildar, who are to inspect at least 25 per cent of the entries in the record of titles of each estate.

(iv) Income from Land Revenue and Special Cesses

Land Revenue.—The Land revenue fixed in the Second Revised Settlement, 1908—11, is realised to this day as there has been no revised settlement thereafter. It is realised twice a year, i.e., for *kharif* by 15th December and for *Rabi* by 15th June. The details of income from land revenue and remission, during 1950-51 to 1965-66, are given below :

Income from Land Revenue and Remissons in Ludhiana District, 1950-51 to 1965-66

Year ending *rabi*	Previous year's balance	Demand	Total amount for recovery	Actual recoveries	Remission	Balance
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1950-51	2,88,161	12,65,706	15,53,867	14,52,022	84,106	17,739
1951-52	17,739	12,65,793	12,83,532	12,55,357	393	27,782
1952-53	27,782	12,64,523	12,92,305	12,06,259	1,803	84,243
1953-54	84,243	12,55,161	13,39,404	12,16,388	3,865	1,91,151
1954-55	..	..	..	..	..	..
1955-56	1,29,210	12,41,737	13,70,947	6,99,670	5,26,392	1,44,885
1956-57	1,44,885	12,39,589	13,84,474	11,68,481	16,067	1,99,926
1957-58	1,99,926	12,36,610	14,36,536	11,64,513	49,037	2,22,986

Year ending *rabi*	Previous year's balance	Demand	Total amount for recovery	Actual recoveries	Remission	Balance
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1958-59	2,22,986	12,34,749	14,57,735	9,20,564	2,84,199	2,52,972
1959-60	2,52,972	13,81,028	16,34,000	12,09,443	1,82,253	2,42,304
1960-61	2,42,304	14,75,431	17,17,735	13,10,541	1,47,912	2,59,282
1961-62	2,59,282	14,86,916	17,46,198	13,84,800	64,880	2,96,518
1962-63	2,96,518	14,83,676	17,80,194	9,21,248	5,88,701	2,70,245
1963-64	2,70,245	16,47,984	19,18,229	15,59,433	64,675	2,94,121
1964-65	2,94,121	16,46,518	19,40,639	13,31,801	5,55,640	53,198
1965-66	53,198	16,52,821	17,06,019	15,57,985	1,23,336	24,698

(*Source* : Deputy Commissioner, Ludhiana).

Special Cesses.—The following cesses are levied on the land-owners :—

Village Officers' Cess

Normally this cess used to include *patwar* cess also. In the earlier settlements, a normal rate for the *patwar* cess was considered to be 6 pies per rupee of land revenue, equivalent to surcharge of 3⅛ per cent, an additional 1/4th or 1/2 per cent being taken on account of Patwari's stationery. Later it was found impossible to meet the expenditure which new standards of revenue work demanded, with so light a cess, and the rate was increased, 6¼ per cent being commonly taken. The *patwar* cess was entirely remitted in 1906, the village officers' cess being reduced to 5 per cent on the land revenue, where *Pachotra* of ordinary village headmen had to be provided, and 6 per cent where there were also chief headmen. The Zaildars and Sufedposhes were paid from the deduction of 1 per cent made from the land revenue collection.

At present, only *pachotra* at the rate of 5 per cent of land revenue is charged as the village officers' cess in the district.

Local Rate

It has grown from small beginnings. It was usual in early settlements to levy a road cess at 1 per cent of the land revenue. Subsequently, education and postal cesses amounting to 1 per cent and half per cent, respectively, were added. But by the Punjab Local Rates Act (XX) of 1871, a local rate amounting to 6¼ per cent on land revenue was imposed. The local rate was raised by the Punjab Local Rates Act (V) of 1878 from 6¼ per cent to 8⅓ per cent for providing relief to the famine stricken people.

With the passing of the Punjab District Board Act (XX) of 1883, the road, education and postal cesses were merged in the local rate, and the legal limit of

the rate was raised to 12½ per cent of the land revenue and owners' rate, and under this Act, the whole of the local rate was credited to the District Board.

Later on, the local rate was reduced to 6¼ per cent. It was raised to 9⅜ per cent, *vide* notification No. 1393-L6-45/9263, dated May 29, 1945, to be enforced from April 1, 1945. But, before the recovery could be effected, it was further raised to 12½ per cent, *vide* notification No. 3497-L6-45/26559, dated October 5, 1945, to be enforced retrospectively from April 1, 1945.

The local rate was further increased to 25 per cent of the land revenue, *vide* notification No. 4393-B & C-48/22423, dated April 26, 1948, to be enforced from Kharif 1947. It was still further raised from Kharif 1948 to 50 per cent of the land revenue which continues to be enforced.

The following table shows the amount of local rate collection in Ludhiana District, during the period 1951-52 to 1965-66 :—

Year ending *Rabi*	Local rate collections
	Rs.
1951-52	.. 9,40,768
1952-53	.. 7,44,568
1953-54	.. 7,08,384
1954-55	.. 7,26,222
1955-56	.. 5,81,721
1956-57	.. 7,14,556
1957-58	.. 7,64,644
1958-59	.. 7,15,268
1959-60	.. 8,75,143
1960-61	.. 7,27,608
1961-62	.. 8,22,950
1962-63	.. 7,49,519
1963-64	.. 8,77,332
1964-65	.. 8,57,711
1965-66	.. 8,51,566

(*Source* : Deputy Commissioner, Ludhiana).

Surcharge on Land Revenue

The assessment on land revenue during the last settlement (i.e., the Second Revised Settlement, 1908—11) was made chiefly on the basis of the then prevailing prices of the produce. Since then the prices of various agricultural products have greatly increased. On the basis of the increasing prices there would be a corresponding increase in the net assets of a circle which would, in the ordinary course, have meant an increase in the assessment of land revenue if regular settlements were undertaken by Government. As, owing to administrative difficulties, it was not possible to conduct regular settlement, and, as the Government immediately needed more revenue to meet the ever increasing expenditure on administration and development, it was decided that a surcharge should be levied on the existing land revenue.

Accordingly, the Punjab Land Revenue (Surcharge) Act, 1954, was enacted for the levy of a surcharge, with effect from the *rabi* harvest of the agricultural year 1953-54. Under the Act, every landowner, who pays land revenue in excess of ten rupees, is liable to pay a surcharge thereon to the extent of one quarter of land revenue if the amount payable by him as land revenue does not exceed thirty rupees, and two-fifths, of the land revenue if it exceeds thirty rupees. It is also provided in the Act that this surcharge shall continue to be levied so long as the assessment of land revenue prevailing at the commencement of the Act continues to be in force.

The income from the surcharge in Ludhiana District, during 1955-56 to 1965-66, is given below :

Year ending *rabi*		Income from surcharge
		Rs.
1955-56	..	2,03,585
1956-57	..	3,22,498
1957-58	..	2,50,159
1958-59	..	2,59,076
1959-60	..	4,07,344
1960-61	..	2,92,112
1961-62	..	2.84,404
1962-63	..	1,92,557
1963-64	..	3,22,166
1964-65	..	2,79,140
1965-66	..	3,26,798

(*Source* : Deputy Commissioner, Ludhiana.)

Special Assessment on Land put to Non-agricultural Use

The income from special assessment on land put to non-agricultural use, levied under the Punjab Revenue (Special Assessment) Act, 1956, in Ludhiana District, during 1958-59 to 1965-66, is given below :

Year	Collection of Special Assessment
	Rs.
1958-59	.. 250
1959-60	.. 82,036
1960-61	.. 21,812
1961-62	.. 14,427
1962-63	.. 7,274
1963-64	.. 14,427
1964-65	.. 699
1965-66	.. 32

सत्यमेव जयते

(*Source* : Deputy Commissioner, Ludhiana)

Special Charge on Land Revenue

In order to meet heavy financial obligations created by various development schemes, it was necessary to augment the State revenues in every possible way and hence a special charge on land revenue was levied under the Punjab Land Revenue (Special Charges) Act, 1958, with effect from *rabi* harvest of agricul-cultural year 1957-58. The rate of special charge is based on income tax pattern with different slabs for different categories of land-owners. The slab rates are such that the incidence of special charge falls on those who can afford to pay it. While the land-holders paying land revenue upto Rs. 50 have been exempt-ted from the provisions of the Act, those paying more than Rs. 1,000 have been subjected to 300 per cent increase in the land revenue. The special charge is to be a permanent feature of the taxation policy of the State Government.

The income from the special charge on land revenue in Ludhiana district, during 1958-59 to 1965-66, is given below :

Year ending *rabi*		Collection of Special Charge
		Rs.
1958-59	..	82,222
1959-60	..	1,40,484
1960-61	..	79,492
1961-62	..	79,083
1962-63	..	57,289
1963-64	..	91,857
1964-65	..	81,117
1965-66	..	89,578

(*Source*:Deputy Commissioner, Ludhiana)

Abiana, Water Advantage Rate, and Betterment Levy

Abiana is charged on the area irrigated by canals. while water advantage rate and betterment levy is charged on the area irrigated by the newly excavated canals of the 1st Bhakra Main Line and the Sidhwan Branch.

The year-wise collections under these heads in Ludhiana district, during 1950-51 to 1965-66, are detailed below :

Year		Abiana	Water advantage rate	Betterment Levy
		Rs.	Rs.	Rs.
1950-51	..	4,14,152	—	—
1951-52	..	5,06,837	—	—
1952-53	..	5,60,090	—	—
1953-54	..	5,87,647	—	—
1954-55	..	6,71,281	—	—

Year		Abiana	Water advantage rate	Betterment Levy
		Rs.	Rs.	Rs.
1955-56	..	2,31,715	38,310	—
1956-57	..	7,61,332	82,996	—
1957-58	..	7,66,211	90,327	—
1958-59	..	4,80,741	69,720	2,01,410
1959-60	..	8,06,067	83,383	24,443
1960-61	..	8,30,564	1,42,025	1,58,323
1961-62	..	8,81,431	99,593	2,23,582
1962-63	..	6,41,196	73,003	1,71,343
1963-64	..	10,02,780	87,828	2,06,027
1964-65	..	6,91,530	82,685	1,94,831
1965-66	..	9,31,645	89,889	2,04,443

(*Source* : Deputy Commissioner Ludhiana).

(b) Land Reforms

The relationship between the landlord and the tenant, based on old-time traditional beliefs, had been, for a long time past, getting strained to the detriment of both. Attempts have, therefore, been made to put the relationship on a statutory basis, eliminating altogether the intermediaries. Thus, the Punjab Tenancy Act, 1887 (Act XVI of 1887) was enacted. It provided for regularisation of the right of occupancy. This right was, however, restricted to a small number of tenants. Under the provisions of the Act, a tenant, to qualify for the right of occupancy, must have held at revenue rates for 30 years, or be the third generation of a family which had held at revenue rates for 20 years or be an ex-proprietor or heir of an ex-proprietor with proprietary and tenant-at-revenue rates status of 20 years standing. Only a few could, therefore, qualify for the right of occupancy. At the same time, while the occupancy right was inalienable , in the Punjab it could be mortgaged, sold or given away. The other tenants who did not have a right of occupancy and did not hold for a fixed term under a contract of a decree or order of competent authority could be ejected at the end of any agricultural year. The security of tenure assured to the Punjab tenant was, therefore, nominal.

The following table shows the distribution of land among various classes of cultivators/land-holders in Ludhiana District:—

Distribution of land among various classes of cultivators/land holders in Ludhiana District

(Area in thousand acres)

Class of Cultivators/Land-holders	Year		
	1910	1947	1960
Tenants-at-will ..	259	334	304
Owners ..	426	618	442
Tenants with rights of occupancy ..	29	53	—
Total cultivated area	714	1,005	746

(*Source* : Deputy Commissioner, Ludhiana).

After Independence (1947), the State Government introduced agrarian reforms, in pursuance of which the following enactments were made:—

1. The East Punjab Utilization of Land Act, 1949 (East Punjab Act XXXVIII of 1949)
2. The Punjab Occupancy Tenants (Vesting of Proprietary Rights) Act, 1953 (Punjab Act VIII of 1953)
3. The Punjab Abolition of Ala Malikiyat and Talukdari Rights Act, 1952 (Punjab Act IX of 1953)
4. The Punjab Security of Land Tenures Act, 1953(Punjab Act X of 1953)
5. The Punjab Bhudan Yajna Act, 1955 (Punjab Act 45 of 1956)
6. The Punjab Resumption of Jagirs Act, 1957 (Punjab Act 39 of 1957)
7. The Punjab Village Common Lands (Regulation) Act, 1961 (Punjab Act 28 of 1961)

Under the Punjab Abolition of Ala Malikiyat and Talukdari Rights Act, 1952, all rights, title and interest of an *ala malik* in the land held under him by an *adna malik* were extinguished and the latter was required to pay

compensation to the former. The Punjab Occupancy Tenants (Vesting of Proprietary Rights) Act, 1953, declared all the occupancy tenants as owners of the land.

Security of Land Tenures.—The Punjab Security of Land Tenures Act, 1953, as amended up-to-date, has not only reduced the acreage which can be reserved but has also specifically prohibited ejectment of tenants from all unreserved areas, except in cases of default in payment of rent or improper cultivation. The Punjab Act XI of 1955, adds, *vide* Section 9-A, that no tenant liable to ejectment shall be dispossessed of his tenancy unless he is accommodated on a surplus area or otherwise on some other land by the State Government. Rent has been limited to a third of the crop or its value or to the customary rent, if that is lower. However, payment for services provided by the landlord are excluded from the computation of rent. The Act further extends the opportunities for tenants to become owners. A tenant of 4 years standing acquires a right of pre-emption at sales or fore-closures; but more important, tenants of 6 years' standing are allowed to buy non-reserved area from their landlords at three quarters of the 10 years average of prices of similar land.

Government have been further empowered to utilise the surplus area of both land-owners and tenants for the resettlement of ejected tenants, landless labourers and small land-owners. All areas owned by (a local owner above 30 standard acres and by a displaced person above 50 standard acres would be considered as 'surplus' area. A small owner, who owns up to 30 standard acres, cannot eject a tenant under the Act from 5 standard acres unless the tenant has been settled by Government on surplus area.

By March 31, 1966, 559 cases of surplus area were decided and 5,994 standard acres of land was declared surplus in Ludhiana District. By the same date 875 eligible tenants had been resettled on surplus area of 1926 standard acres. Proprietary rights were given to the tenants in an area of 264 acres.

The State Government gives financial assistance for reclamation purposes to those tenants and landless agricultural workers who are re-settled on surplus area, and also advances loans for building of houses and sinking of wells.

Utilization of Lands.—Under the East Punjab Utilization of Lands Act, 1949, the Government enforced the utilization of every inch of available culturable land for growing more food and other essential crops. Under this Act, a notice to take over the land is served on every land-owner who allows his land to remain uncultivated for 6 or more consecutive harvests and the land thus taken over is leased out to others for a term ranging from 7 to 20 years, priority being given to Harijans. Under the provisions of the Act,

8,110 acres of land was taken over in the district, whole of which was leased out by March 31, 1966.

Three other laws complete the reform of the tenancy system. The Punjab Bhudan Yajna Act, 1955, created a Bhudan Yajna Board to receive land gifts and to allot land to the landless. Under the Punjab Resumption of Jagirs Act, 1957, all *jagirs, muafis* and *jagir* pensions, except military *jagirs* granted in or after Augutst, 4, 1914, any pension as defined in clause (17) of Article 366 of the Constitution, and any grant made in favour of religious and charitable institutions, were resumed on November 14, 1957. The compensation to the extent of 7 times the annual *jagir* was paid to the holders in lump sum or in instalments with interest at 2 per cent per annum. The Punjab Village Common Lands (Regulation) Act, 1961, has provided for the giving of village common land to landless persons.

Consolidation of Holdings.—The systematic and large scale development in agriculture is not possible in case the holdings are small and the fields lie scattered. It is only through the consolidation of holdings that land situated widely apart in tiny strips assumes a compact and convenient shape. Uneconomic, neglected and inaccessible holdings are re-grouped into consolidated, composite and homogenous blocks. The regular sizable fields enable the use of new extensive agricultural techniques. Circular approach roads increase the mobility between fields and villages ; and the land procured for institutions like *panchayat ghar* and schools helps initiate the social welfare programme. The work of consolidation of land-holdings had been started by the Co-operative Department since 1930, i.e. long before the Punjab partition of 1947, but in the absence of necessary legislation, the work did not make much headway. Realizing the importance of the work, the State Government enacted the East Punjab Holdings (Consolidation and Prevention of Fragmentation) Act, 1948 (East Punjab Act, L of 1948) and created a separate Consolidation Department in 1949.

Consolidation of land is a great boon to the agriculturist. The tiller is saved to a great extent from the labour of supervision and irrigation which he has to put in when holdings are scattered. The tiller generally finds it difficult to look after the crops scattered at different places and it is also cumbersome to maintain long channels and water-courses intact. But the consolidation of holdings makes it possible for one man to irrigate the fields and keep a close watch over it. He can avail himself of the facilities of modern agricultural implements and introduce tractor cultivation in consolidated holdings. A lot of virgin land is also reclaimed by the Government as a corollary to the scheme of consolidation. In fact, consolidation brings about a revolutionary improvement in the economic structure for a land tiller.

The work of consolidation of land holdings was started in tahsils Samrala and Jagraon in 1952 and tahsil Ludhiana in 1955.

Bhudan.—The Punjab Bhudan Yajna Act, 1955, was passed to promote the movement initiated by Acharya Vinoba Bhave. Though only 8 acres of land has so far been given in Bhudan in the district, yet the spirit behind the movement has been appreciated by the people.

Rural Wages and Condition of Agricultural Labour.—The condition of agricultural labour is considerably low. This category of labour is not organised. Though wages for agricultural labour have increased during the past few years, yet favourable conditions of work or benefits of service are nowhere to be seen.

(c) Other Sources of Revenue—State and Central

(i) **Other Sources of State Revenue.**—The other sources of State revenue, besides land revenue, are: Stamp Duty, Registration Fee, Professions Tax, Excise, Property Tax, Sales Tax, Entertainments Duty, Motor Spirit Tax, Passengers and Goods Tax, Show Tax, Central Sales Tax and Electricity Duty.

Stamp Duty.—The Indian Stamp Act (No. II) of 1899 came into force on July 1, 1899. It was amended by the Punjab Act VIII of 1922. The second amendment was made by the Indian Stamp (Punjab Second Amendment) Act (No. 34) of 1960.

Stamp revenue is derived from two classes of stamps—Judicial or Court Fee and Non-Judicial or Revenue Stamps. The Judicial Stamps represent the fee payable by persons resorting to Courts of Law or Public Offices, while the Non-Judicial Stamps are levied on commercial transactions which are recorded. These duties are administered by the Collector (Deputy Commissioner) who ensures that the documents are properly stamped according to the prescribed schedule.

The Treasuries in the district serve as depots for the custody and the sale of stamps of different denominations. Stamps are also sold by authorised vendors on commission basis. Between 1957-58 and 1965-66, there has been four-fold increase in revenue from this source in the district.

The collection of stamp duty in the district, during 1957-58 to 1965-66, was as under :

Year		Judicial	Non-judicial	Total
		Rs.	Rs.	Rs.
1957-58	..	4,72,719	8,13,351	12,86,070
1958-59	..	4,94,815	10,65,537	15,60,352
1959-60	..	5,20,755	11,90,277	17,11,032
1960-61	..	5,76,461	18,85,828	24,62,289
1961-62	..	3,23,276	38,53,059	41,76,335
1962-63	..	6,63,718	43,57,481	50,21,199
1963-64	..	7,21,263	39,77,969	46,99,232
1964-65	..	8,80,633	41,49,966	50,30,599
1965-66	..	9,77,856	34,36,685	44,14,541

(*Source* : Treasury Officer, Ludhiana.)

Registration Fee.—Under the Indian Registration Act (XVI) of 1908, all documents pertaining to immovable property should be registered according to the nature of the document. The chief items of receipts collected by the Registration Department are in respect of registration of documents, making or granting of copies, searching the registers and authentication of powers of attorney. A few classes of documents have, however, been exempted from the payment of fees in whole or in part, e.g., (a) mortgage deeds executed by Government servants in respect of advances for house building, (b) documents relating to co-operative societies and land morgage banks, (c) encumberance certificates issued in connection with loans under the Agriculturists' Loans Act.

The number of registrations, value of property registered and receipts in the district, during 1958 to 1965-66, are given in the following statement :—

Particulars of Registration in Ludhiana District, 1958—1965-66

Year		No. of Registrations		Aggregate value of property registered	Amount of ordinary fees	Other receipts	Total receipts
		Immovable property	Movable property				
				Rs	Rs	Rs	Rs
1958-59	..	14,009	919	3,75,84,526	3,05,015	6,676	3,11,691
1959-60	..	16,181	1,060	4,43,90,767	3,49,946	8,421	3,58,267
1960-61	..	18,068	767	5,13,07,661	3,81,751	14,642	3,96,393
1961-62	..	12,915	568	3,74,97,138	2,69,329	8,254	2,77,583
1962-63	..	14,215	687	4,74,88,940	3,25,228	9,105	3,34,333
1963-64	..	13,841	846	4,67,05,462	3,31,379	12,207	3,43,586
1964-65	..	17,294	1,013	6,37,13,014	4,28,547	11,362	4,39,909
1965-66	..	16,577	3,189	15,20,81,519	5,88,374	13,642	6,02,016

(*Source* : Deputy Commissioner, Ludhiana)

Professions Tax.— Every person who carries on trade, either himself or through an agent or representative, or who follows a profession or calling or is in employment either wholly or in part, within the Punjab State, is liable to pay for each financial year or part thereof, a tax under the Punjab Professions, Trades, Callings and Employments Taxation Act, 1956. The maximum limit of the tax payable by any person is Rs. 250 in a financial year. The Excise and Taxation Officer, Ludhiana, implements the Act in the district. Before 1965 the Treasury Officer was the Assessing Authority for the purpose.

The table below shows the amount realised on account of professions tax in Ludhiana District, during 1958-59 to 1965-66:

Year		*Amount* Rs.
1958-59	..	1,59,489
1959-60	..	2,26,610
1960-61	..	3,08,619
1961-62	..	3,00,640
1962-63	.	8,89,113
1963-64	..	7,93,544
1964-65	..	8,48,647
1965-66	..	7,85,750

(*Source* : Excise and Taxation Officer, Ludhiana)

Excise and Taxation.—For the administration of Excise and Taxation Acts, the district is under the charge of an Excise and Taxation Officer, who is assisted (as on November 1, 1966) by 2 Additional Excise and Taxation Officers, 10 Assistant Excise and Taxation Officers, and one Asssessing Authority. He is further assisted by one Inspector and 6 Sub-Inspectors on the excise side, and 2 Inspectors and 34 Sub-Inspectors on the taxation side, besides other miscellaneous staff. Ludhiana district falls under the jurisdiction of the Deputy Excise and Taxation Commissioner, Patiala.

The State and Central Acts that are enforced in the State on the excise side are : The Punjab Excise Act, 1914, The Punjab Local Option Act, 1923, The East Punjab Molasses (Control) Act, 1948, The Indian Opium Act, 1878, The Dangerous Drugs Act, 1930, The Indian Power Alcohol Act, 1948, The Medicinal Toilet Preparation (Excise Duties) Act, 1955, and The Spirituous Preparation (Inter-State Trade and Commerce) Central Act, 1955.

The excise revenue from Ludhiana District, during 1956-57 to 1965-66, is shown below :

Year	Income under Excise Act	Income under Opium Act	Total
	Rs.	Rs.	Rs.
1956-57 ..	13,51,744	9,41,632	22,93,376
1957-58 ..	22,38,696	7,16,557	29,55,253
1958-59 ..	30,78,015	3,24,511	34,02,526
1959-60 ..	36,20,431	14,400	36,34,831
1960-61 ..	39,35,393	5,600	39,40,993
1961-62 ..	44,66,339	2,400	44,68,739
1962-63 ..	49,04,650	800	49,05,450
1963-64 ..	65,90,435	800	65,91,235
1964-65 ..	1,08,65,419	800	1,08,66,219
1965-66 ..	1,35,89,786	1,720	1,35,91,506

(*Source* : Excise and Taxation Officer, Ludhiana.)

On the taxation side, the following State and Central Acts are enforced by the department :—

(1) Property Tax

This tax was levied under the Punjab Urban Immovable Property Tax Act, 1940. It is charged at the rate of 10 per cent of the annual rental value of the buildings and land, situated in the rating area, which is determined after 15 per cent deduction for repairs from the gross annual rent.

(2) Sales Tax

The Punjab General Sales Tax Act, 1941, was repealed on May 1, 1948, when the East Punjab General Tax Act, 1948, came into force.

(3) Entertainments Duty

The Punjab Entertainments Duty Act, 1936, was repealed and in its place the Punjab Entertainments Duty Act, 1955, was enforced with effect from

November 4, 1955. The rates of duty change from time to time. The Act provides that entertainment duty shall not exceed in any case 50 per cent of the payment for admission ; and in the case of complimentary tickets, the rate of duty shall be 50 per cent of the payment for admission to the particular class.

(4) Motor Spirit Tax

This tax was levied under the Punjab Motor Spirit (Taxation of Sales) Act, 1939. The rate of tax, which remained 3 annas per imperial gallon till July 14, 1957, has been changing thereafter from time to time.

(5) Passengers and Goods Tax

The Punjab Passengers and Goods Taxation Act, 1952, was enforced on September 1, 1952. The Act provides that the tax shall be levied on all fares and freights in respect of passengers carried and goods transported in motor vehicles in the Punjab. The rate of the tax has been enhanced from time to time. In 1965-66, the rate of fare and freight paid by passengers, was 25 per cent of the fare. The rate of tax per truck per quarter was : on trucks within the Punjab Rs 135.00; and on trucks countersigned by other States and on trucks running in hilly area Rs 202.50.

(6) Show Tax

The Punjab Entertainment Tax (Cinematograph Shows) Act, 1954, was enforced on May 4, 1954. The tax is levied for every show on the number of occupied seats of cinema. The Act provides that the tax shall not exceed Rs 10 per show in any case and shall be charged proportionately for a fraction of 100 seats.

(7) Central Sales Tax

The Central Sales Tax Act, 1956, came into force in January, 1957, enabling the State Governments to tax inter-State sales of goods. The States have been authorised to administer this tax on behalf of the Government of India, the entire collection being appropriated by the States.

(8) Electricity Duty

It was levied with effect from April 1, 1958, under the Punjab Electricity (Duty) Act, 1958 (Act 10 of 1958), as a part of the education cess to meet the additional financial burdens undertaken by the State on account of introduction of free education and provincialisation of local body schools. The duty is levied on the enegry supplied by the Punjab States Electricity Board to a consumer or a licencer and it is collected by the Board along with the bills for the energy thus supplied. On realization, the proceeds are deposited by the Board in Government Treasury, Sub-Treasury or the State Bank of India.

Taxation Revenue in Ludhiana District, 1956-57 to 1965-66

Tax	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Property Tax ..	5,66,946	6,16,197	6,22,739	6,44,140	8,62,141	13,81,585	10,66,725	13,90,568	14,85,833	14,22,066
2. Sales Tax ..	30,34,558	37,79,034	39,22,644	44,58,738	50,77,176	61,09,684	67,95,883	97,64,365	1,35,63,188	1,46,28,447
3. Entertainments Duty ..	4,14,504	5,29,794	6,35,211	6,82,906	7,19,118	9,77,323	11,10,938	13,46,203	16,64,666	18,16,636
4. Motor Spirit Tax ..	2,48,530	3,44,892	3,83,203	4,71,680	5,26,271	5,97,960	6,22,367	6,76,110	7,58,776	7,98,271
5. Passengers and Goods Tax	6,08,511	8,50,081	8,87,209	9,49,308	10,31,657	11,57,105	15,39,267	27,05,590	27,90,956	30,22,324
6. Show Tax ..	..	31,234	41,282	44,538	40,147	42,270	44,398	48,644	50,230	91,114
7. Central Sales Tax ..	..	..	13,97,866	17,59,134	19,98,780	24,50,499	31,05,348	54,24,499	71,38,581	71,47,082

(*Source* : Excise and Taxation Officer, Ludhiana ; and Chief Electrical Inspector to Government, Punjab, Patiala)

(ii) Central Sources of Revenue

Central Excise Duties.—The Central Excise Circle, Ludhiana, which falls in the Central Excise Division, Chandigarh, comprises Ludhiana Range I (consisting of Miller Ganj and Industrial Areas A and B of Ludhiana proper) and Ludhiana Range II (consisting of the remaining Ludhiana District and the whole of Ferozepore District). The main sources of Central Excise Duty include cotton fabrics and yarns, woollen fabrics and yarns, rayon and synthetic yarns, internal combustion engines, radios, electric fans, electric motors, electric batteries, cycle parts, wires and cables, sodium sillicate, sugar, *khandsari*, non-essential oils, tobacco, etc.

Income Tax.—The Indian Income Tax Act, 1922, was replaced by the Income Tax Act, 1961, on April 1, 1962. The income tax is levied in accordance with the rates specified in the Finance Act of the relevant year passed by the Parliament.

Wealth Tax.—The Wealth Tax Act, 1957, came into force from the assessment year 1957-58, In the case of an individual, the tax is leviable if the net wealth exceeds Rs. 2 lakhs, and in the case of Hindu un-divided family, if it exceeds Rs. 4 lakhs.

Gift Tax.—The Gift Tax Act, 1958, was enforced on April 1, 1958. It is leviable on all gifts made after April 1, 1957 (i. e. from the financial year 1957-58 and the assessment year 1958-59) if the total value of the gift (moveable or immovable) exceeds Rs. 10,000. This limit was lowered to Rs. 5,000 with effect from 1963-64. [23]

Estate Duty.—The Estate Duty Act, 1953 (Act 34 of 1953) was enforced on October 15, 1953. The duty is leviable on the estates of persons dying after this date. Proceedings for this levy are to be initiated within 5 years of the death; but no time limit has been fixed for the completion of assessment. For levy of estate duty, the Ludhiana district falls under the jurisdiction of the Assistant Controller of Estate Duty, Jullundur Circle, Jullundur.

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23. For levy of Gift Tax, the limit of the total value of the gift was again raised to Rs. 10,000 with effect from the assessment year 1967-68.

The collections from the above mentioned taxes in Ludhiana district, from 1961-62 to 1965-66, are given in the following statement:—

Collections from Central Sources of Revenue in Ludhiana District, 1961-62 to 1965-66

(Thousand rupees)

Tax		Collections				
		1961-62	1962-63	1963-64	1964-65	1965-66
		Rs.	Rs.	Rs.	Rs.	Rs.
1. Central Excise Duties	..	4,585	6,272	7,863	8,071	6,800
2. Income Tax	..	..	..	..	..	16,594
3. Wealth Tax	..	95	55	54	66	98
4. Gift Tax	..	64	22	51	78	70
5. Estate Duty	..	36	75	48·5	162	75

(*Sources* : Income Tax Officer, Ludhiana; Treasury Officer, Ludhiana; and Assistant Controller of Estate Duty, Jullundur Circle, Jullundur)

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APPENDIX

(*Vide* Page 422)

Schedule of Special Charges levied under The Punjab Land Revenue (Special Charges) Act, 1958

(a) Land revenue exceeding Rs. 50 but not exceeding Rs. 100 annually—

On the first Rs. 50	..	Nil
On the remaining Rs. 50 or part thereof	..	50 per cent

(b) Land revenue exceeding Rs. 100 but not exceeding Rs. 200 annually—

On the first Rs. 50	..	Nil
On the next Rs. 50	..	50 per cent
On the next Rs. 100 or part thereof	..	70 per cent

(c) Land revenue exceeding Rs. 200 but not exceeding Rs. 500 annually—

On the first Rs. 50	..	Nil
On the next Rs. 50	..	50 per cent
On the next Rs. 100	..	70 per cent
On the next Rs. 300 or part thereof	..	100 per cent

(d) Land revenue exceeding Rs. 500 but not exceeding Rs. 1,000 annually—

On the first Rs. 50	..	Nil
On the next Rs. 50	..	50 per cent
On the next Rs. 100	..	70 per cent
On the next Rs. 300	..	100 per cent
On the next Rs. 500 or part thereof	..	150 per cent

(e) Land revenue exceeding Rs. 1,000 annually—

On the first Rs. 50	..	Nil
On the next Rs. 50	..	50 per cent
On the next Rs. 100	..	70 per cent
On the next Rs. 300	..	100 per cent
On the next Rs. 500	..	150 per cent
On the remaining amount	..	300 per cent

CHAPTER XII

LAW AND ORDER AND JUSTICE

Situated towards the east of river Satluj and included in the protected Cis-Satluj territories, Ludhiana had been under the political or direct administration of the British since the conclusion of the treaty of Amritsar in 1809. The natural consequence of the position assumed by the British Government, at the request of chiefs in the area between the rivers Satluj and the Yamuna, was that the petty principalities continued to enjoy complete independence in their internal administration under the paramount British authority. In the course of the years, however, several chiefships lapsed and the British Government, whose political Agent was already functioning in the town of Ludhiana, acquired strips of territory around the station.

After the First Anglo-Sikh War in 1846 the possessions of the Lahore Darbar to the south of the river were confiscated and most of the protected Chiefs having failed in their duty to the paramount power lost their *Faujdari* powers. The Cis-Satluj possessions under the direct administration of the British having considerably increased, a Commissioner with proportionate supporting staff was appointed to administer the district. The same system of administration as was carried out in the subsequently annexed Punjab had already been introduced there. After the annexation of the kingdom of Lahore in 1849, the Cis-Satluj areas were placed on the same footing as the rest of the territories under the Board of Administration. The principles of administration, civil, criminal and police, did not differ from those followed in the rest of the Punjab. The district practically assumed its present form in 1850.

Under the new administrative set-up, the Deputy Commissioner was called upon to organise effective police control, take possession of forts and public buildings and make necessary arrangements for the prevention and detection of crime. The arrangements continued till 1857, when, as a result of large scale disturbances in the district, radical changes were required to be made in the Police Administration.

There existed since the year 1848 a Branch Thugee Office at Ludhiana for the suppression of this type of heinous crime in the Cis-Satluj territories. This agency, of which the district officer for the time being was the *ex-officio* Superintendent, did useful work for several years. It was abolished towards the close of 1853 because it had been rendered unnecessary as a result of the general measures adopted for the eradication of the crime throughout the province. During

the last year of its existence 12 Thugs were arrested, of whom 5 were committed, five released on security and 2 acquitted. Of the five committed, 4 were transported for life and one was placed on security.

The returns of crime for the year 1852 were the earliest statistics which could be treated as reasonably accurate or comprehensive. The figures when classified into broad different categories greatly helped the proper understanding of the incidence of crime. The analysis of the figures not only revealed to what degree the Police had functioned efficiently ; but also brought to light the customs and habits of certain criminal groups and the contributive causes responsible for the commission of various crimes in the district. The analysis of the principle forms of crime thus presented a vivid picture of the state of society in the early years of British rule in the Punjab.

(a) **Incidence of Crime.**—"When reference is made to the condition of this part of the country preceding Annexation (1849)", observes H. Davidson, "I do not think it astonishing, that generally the population should have been notorious for criminal propensities, especially highway robbery, and theft of all sorts. Independently of this, there are certainly some castes, Baoreas, Harnees, etc., scattered among the population, whom no system of Government may be able entirely to reclaim[1] ." The propensity of crime decreased with the establishment of police posts and, in 1883, T. Gordon Walker observed that " the mass of the people are quite contented and law-abiding. The exceptions are the Gujars, perhaps the Rajputs, the criminal tribes of Harnis, etc., and to these I may add the rable of the towns. I do not think that the people of the District have a predilection for any special form of crime, most of the serious offences coming under the heads of theft and burglary. The Gujars in the *Bet* do a good deal of cattle-lifting.. .. ..The Rajputs do not go beyond gambling. The Harnis, Baurias and other professional criminal classes are not showing many signs of regeneration under our (British) rule, and to their account a great deal of the crime of the District must be set down. Even with them the amount of crime is not more than normal, and the District will compare favourably with most in the province[2]."

On the re-organisation of the Police under the Act of 1861, prompt measures were taken to check the crime which had already shown an upward trend. It was realised that certain classes of habitual offenders were responsible for increased incidence. The system of registering of such persons in a special register was expected to give them sufficient notoriety among law abiding community. Similarly suspected characters with loose habits and doubtful means of

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1. G.C. Barnes, *Report on the Revised Settlement of the District of Ludhiana*, 1859, p. 31.

2. T. Gordon Walker, *Final Report on the Revision of Settlement of the Ludhiana District* 1878-83, p. 149.

livelihood were also required to be watched by the Police. To obtain correct information about this class of persons the headman or other respectable members of the village community were required to be consulted. The most important of the bad characters were the gypsy tribes known as the Sansis or Baurias, who were well known for their shady habits. The ordinary penal procedure totally failed to repress their activities. As a long range policy Reformatories were organised for their rehabilitation into normal life.

The Indian Penal Code came into force on January 1, 1862. Measures were taken to systematise the procedure enabling the Police to deal more effectively with organised crime. The help of Col. Hervey, Superintendent General of Thuggee and Dacoity operations in the native States, was sought to discover the hiding places of the plunderers, who infested the territories of the native States. Thus certain crimes which formerly were very prevalent in the Punjab were altogether suppressed as a result of Police exertions. Child stealing, importation of slaves and counterfeiting of coins which were generally overlooked or legalised disappeared altogether. The face of the country being generally marked by alterations of waste and cultivation, nearly all highways passed through some desolate localities. That many of these places should be infested with highway men was hardly surprising. Steady measures were adopted to ensure safety on the roads, to establish police posts and to arrange for patrolling by footmen and horsemen.

The partition of the Punjab plunged the newly constituted East Punjab province into carnage with all its dire consequences. Even though the communal frenzy died down in the wake of mass migration, the resulting disequilibrium created a host of problems for the Police. Along with the refugees a large number of confirmed bad characters and members of criminal tribes came across the border and took full advantage of the disturbed conditions. A special staff was accordingly organised to spot out criminals who had crossed the border before they could establish local contacts. The Police found the task very difficult because all the important files and records of these criminals were left at Lahore.

Apart from the grim background and the unfortunate aftermath of the partition a large number of other factors were also responsible for the sudden increase in the incidence of crime and decline in the efficiency of the Police force. The communal disturbance and the widespread rioting and violent crime had produced in the public mind a diminishing respect for law and moral values. The tendency towards general lawlessness and false notion of freedom appeared to have been the main causes of the weakening of the forces of law and order. Consequently, some unimportant local quarrels which could easily have been checked in the past by the local authorities no longer subsided very

early but led to greater violence. The wholesome fear of law was no longer a restraining force. Whereas in the past a *Thanedar* could deal with the situation single-handed even senior officers found themselves seriously handicapped or even helpless as a result of improper local influence.

With the abolition of the non-official agencies like Honorary Magistrates, Zaildars and 'Sufaidposhes', which rendered useful assistance to the Government, in 1948[3], the police was deprived of valuable support in its work in rural area. Their removal was inevitable under the new democratic set-up established in the country. Consequent upon the establishment of the Panchayati Raj in the Punjab in 1961, the Sarpanches and Panches are expected to play their full part in the day-to-day work of the administration and in the maintenance of law and order.

The Criminal Tribes Act was repealed and replaced by the Habitual Offenders (Control and Reform) Act of 1952. As a result of lifting of restrictions on ex-criminal tribes large number of bad characters were to be carefully watched. This was particularly necessary in urban areas where the ex-criminal tribes could find suitable opportunities for theft and burglaries. Several gangs of dangerous and hardened professional criminals were brought to light. A special staff has been created since 1960 to enforce the provisions of the Suppression of Immoral Traffic in Women and Girls Act, 1956. Steps have also been taken to establish Boys Clubs in important towns to wean away delinquents from crime and immorality.

An idea regarding the trend of crime of all kinds brought to trial in the district during the years 1956—65 may be had from the following table :—

Year		Reported Cases	True Cases
1956	..	5,196	2,778
1957	..	5,577	4,200
1958	..	5,677	3,348
1959	..	6,057	6,148
1960	..	6,742	6,394
1961	..	5,761	5,639
1962	..	8,411	7,123
1963	..	8,325	8,169
1964	..	9,773	9,634
1965	..	11,958	10,217

(*Source* : Superintendent of Police, Ludhiana.)

3. The institutions of *Zaildari* and *Sufaidposhi* were revived in 1950; but were again abolished in 1952.

Murder.—Illicit sexual relations, domestic quarrels, blood feuds, land disputes, lure of property, canal water disputes, personal enmity, party factions, etc., are the common causes of the crime. Sometimes murders are committed after thoughtful planning and the culprits take care to leave no clues behind. Thus it becomes difficult for the police to trace them out. The result in many such cases is the acquittal of the accused persons and failure of law to bring the culprit to book. The incidence of murder is mainly confined to rural areas where party factions and disputes over women and land culminate in the commission of this heinous crime. Once the game is started, its chain of revengeful action often continues for decades despite strict surveillance by the local police. It is also a fortuitous crime and is sometimes committed over minor and trifling issues in a sudden outburst of anger. In such cases, no amount of police alertness can prevent it.

The following table illustrates the incidence of murder in the district during the period 1956---65 :—

Year		Reported Cases	True Cases
1956	..	42	43
1957	..	31	40
1958	..	38	30
1959	..	45	67
1960	..	32	59
1961	..	30	39
1962	..	35	19
1963	..	27	27
1964	..	39	27
1965	..	40	36

(*Source* : Superintendent of Police, Ludhiana.)

Dacoity.—As the following table shows, the district remained immune from the incidence of dacoity during the period 1956—65 except for 1962. The single case reported during 1962 was also of an ordinary nature and no gang as such was responsible for it.

Year	No. of cases
1956	—
1957	—
1958	—
1959	—
1960	—
1961	—
1962	1
1963	—
1964	—
1965	—

(*Source* : Superintendent of Police, Ludhiana.)

Robbery.—As in the case of dacoities, the district has shown considerable improvement in the incidence of robberies. Systematic *naka bandis* and extensive patrolling of strategic points are mainly responsible for keeping this crime under effective control. The following table depicts the position of the crime during the period 1956—65 :—

Year	Reported Cases
1956	20
1957	8
1958	8
1959	8
1960	2
1961	5
1962	4

Year	Reported cases
1963	—
1964	2
1965	1

(*Source* : Superintendent of Police, Ludhiana)

Burglary.—There was not much fluctuation in the incidence of this crime in the district during the period, 1956—65, except for the years 1960, and 1961 when the number of cases reported under this head was 194 and 179, respectively. The incidence of the crime ranged between 271 (in 1957) to 232 (in 1962). Vigilant patrolling, appropriate use of preventive sections of the Criminal Procedure Code, enforcement of villagers' responsibility for patrolling, rounding up the untraced criminals and bad characters and intelligent and efficient investigation by the District Central Intelligence Agency are the main factors which have brought considerable reduction in the incidence of the crime.

The proportion of the untraced burglaries is no doubt high ; but there are certain factors which militate against the successful working out of these cases. The possible clues which are valuable for tracing out such cases are generally destroyed by the ignorant people who gather at the spot after the occurrence. In some cases, the complainants lay suspicions on innocent persons on account of their personal enmity or disputes.

The incidence of burglary in the district during the years 1956 to 1965 is given in the following table :—

Year	Cases brought forward from previous year	Cases reported during the year	Cases admitted	Cases tried	Cases convicted	Cases untraced
1956	35	254	286	78	68	153
1957	58	271	321	85	63	169
1958	75	263	538	92	76	158
1959	88	262	349	68	62	191
1960	81	194	273	38	30	120
1961	26	179	203	48	34	..
1962	76	232	304	33	20	98
1963	118	223	354	82	58	57
1964	132	272	393	102	67	61
1965	150	236	381	68	35	109

(*Source* : Superintendent of Police, Ludhiana.)

Rioting.—Riots generally take place in rural areas. Disputes over land and personal rivalries on account of party faction are responsible for the incidence of this crime. Experience has shown that the parties, who fall out on momentary passions, come to senses after some time and patch up their differences by the time the cases are put in court. The results of such cases are, therefore, poor.

The following table gives the incidence of riots in the district during 1956 to 1965 :—

Year	No. of cases reported
1956	20
1957	6
1958	13
1959	8
1960	12
1961	5
1962	7
1963	2
1964	14 (plus 2 for Police Station Payal)
1965	5

(*Source* : Superintendent of Police, Ludhiana.)

The figures show that there has been an appreciable improvement during the period. The number of cases reported during 1963 was the lowest.

Theft.—The incidence of ordinary theft has shown an upward trend and mostly the increase has been reported from urban areas. Tremendous increase in the population of Ludhiana City due to rapid industrialization spread over a vast and ever expanding area, resulting in influx of a large labour force of unknown antecedents and little corresponding increase in the strength of the police force are the main causes leading to an increase in thefts.

The labourers have come to this city from far off places and it is difficult for the local police to verify their antecedents, particularly of those who have come from other states. Quite a number of these workers and rickshaw-pullers have shady past and commit thefts.

Thefts in rural areas of the district take place in small numbers, firstly, because the village *abadis* are small and the inhabitants know each other, and secondly, the rural population of the district is generally well-off. The spectacular rise in agricultural production through improved agricultural implements and practices as also rise in the prices of agricultural produce have brought prosperity to the people thereby eliminating the raison d'etre for theft.

The following table gives the incidence of theft in the district from 1956 to 1965 :—

Year	Cases reported	Total cases dealt with (including those pending for the last year)	Cases admitted	Cases tried	Cases convicted
1956	320	64	371	162	115
1957	391	76	449	159	109
1958	428	140	551	189	136
1959	411	102	503	130	109
1960	366	128	491	95	61
1961	325	55	370	99	64
1962	409	127	524	108	75
1963	403	153	507	126	73
1964	562	195	731	148	100
1965	548	376	907	115	74

(*Source* : Superintendent of Police, Ludhiana .)

Cattle Lifting.—This crime is mostly prevalent in rural areas. Its incidence has shown a progressive decrease as borne out by the following decennial table for the years 1956 to 1965 :—

Year	Cases brought forward from previous year	Cases reported during the year	Total cases dealt with	True cases	Cases tried	Cases convicted
1956	2	10	12	10	4	4
1957	5	15	20	20	8	6
1958	5	17	22	22	6	5
1959	6	17	23	22	7	6
1960	5	9	14	14	4	3
1961	3	14	17	15	1	1
1962	7	12	19	18	5	4
1963	6	13	19	12	6	3
1964	7	7	14	9	6	4
1965	4	11	15	6	4	3

(*Source* : Superintendent of Police, Ludhiana.)

Traffic in Women.—The crime under this head did not show noticeable variation during the decade from 1956—65. The greatest difficulty in curbing this type of crime is that most of the cases are utlimately found to be of consent in which the young girls willingly elope with their paramours. Some of the cases are, however, registered simply on administrative and moral grounds even though the girls are known to be above the age of consent (i.e., 18 years) and to have willingly gone with their consorts. In such cases the primary concern of the police is to restore the kidnapped women to the parents.

Kidnapping is a social evil and the police can hardly play an effective role in curbing it. In rare cases, economic distress may lead to kidnapping, but mostly it takes place for immoral purposes. Laxity of moral values, lack of education, and allurement of voluptuous life sometimes result in the elopement of innocent girls. The reported cases of kidnapping and abduction were isolated in character, and not the work of any organised gangs.

The incidence of crime under this head during 1956 to 1965 is given below :

Year	Cases reported
1956	25
1957	27
1958	29
1959	32
1960	33
1961	46
1962	34
1963	35
1964	34
1965	41

(*Source* : Superintendent of Police, Ludhiana.)

During the last few years, no case under the Suppression of Immoral Traffic in Women and Girls Act, 1956, has been registered in the district. Under the Act, no brothel or place of ill-repute is allowed to be set up.

Cheating.—With the rapid industrialisation and urbanisation of Ludhiana, the incidence of cheating has shown marked increase. Most of the cases are reported to the police by the parties in order to settle certain disputes of civil nature. A good number of these are ultimately compromised by the parties and this factor accounts for the low percentage of convictions.

The number of cases of cheating, reported in the district during 1956—65, are given below :

Year	Cases reported
1956	44
1957	33
1958	34
1959	27
1960	26
1961	39
1962	35
1963	25
1964	50
1965	50

(*Source* : Superintendent of Police, Ludhiana.)

Offences under Local and Special Laws.—The offences under this head comprise cases under the Police, Arms, Excise, Opium, Gambling, Essential Commodities, Railways, Prevention of Corruption Acts, etc. The

number of cases reported under the various Local and Special Acts, during the period 1956 to 1965, are given in the following table :—

Cases reported under Local and Special Acts

Year	Police Act of 1888 (cases of public nuisance)	Arms Act 1878/ 1959	Excise Act 1914	Opium Act 1878	Public Gambling Act, 1867	Essential Commodities Act, 1955	Indian Railways Act	Prevention of Corruption Act, 1947	Defence of India Rules, 1942
1956	2,971	65	501	174	186	—	8	4	...
1957	3,214	63	597	46	284	.	14	16	—
1958	2,724	79	554	488	345	—	14	15	—
1959	3,080	147	614	500	283	—	8	7	—
1960	3,358	153	698	560	139	—	10	11	
1961	2,508	264	881	550	179	—	8	4	—
1962	4,852	391	887	586	277	1	6	4	—
1963	4,447	121	997	943	297	2	7	2	18
1964	5,496	70	965	1,023	329	16	11	4	4
1965	7,470	68	1,201	909	347	2	10	7	26

(*Source :* Superintendent of Police, Ludhiana.)

Incidence of Motor Vehicle Accidents.—Ludhiana district being in the centre of the State, vehicular traffic from all points of the State passes through it. The State buses, carrying passengers from various districts of the State, also pass through it. The heavy goods traffic from Delhi and Kashmir is also channelled through this district. The roads, particularly in urban areas of the district, are very narrow.

The Grand Trunk Road passes through the heart of the Ludhiana City. With the rapid industrial and commercial development of Ludhiana, the population of the city has increased by leaps and bounds with the result that there is a great congestion on the roads of the city. The vehicular traffic, particularly on the G.T. Road, has increased enormously. The construction of the Bye-Pass has not much lessened the pressure on the G.T. Road.

All these factors have resulted in increase in the number of accidents. The prosecutions for traffic offences, launched under the Indian Motor Vehicles Act, 1939, in the district, during the period 1956 to 1965, are given below :

Year	Prosecutions launched
1956	1,652
1957	2,474
1958	3,481
1959	2,244
1960	2,777
1961	3,767
1962	3,104
1963	4,602
1964	5,635
1965	5,592

(*Source* :—Superintendent of Police, Ludhiana)

Road Traffic.—Besides the Motor Vehicles Act, 1939, sections 279, 337, 338 and 304-A of the Indian Penal Code, the Punjab Municipal Act, 1911, and the Municipal Bye-laws, the State Carriages Act, XVI of 1961, the Police Act of 1888, the Prevention of Cruelty to Animals Act, 1890 the Punjab Motor Vehicles Taxation Act, 1924, and the Hackney-Carriage Act, 1879, regulate the road traffic. The number of prosecutions launched under the various Acts, during 1963—65, is given below :

Name of the Act	*Year*		
	1963	1964	1965
Indian Penal Code	104	112	136
Municipal Act and Municipal Bye-Laws	8,766	6,478	695
Stage-Carriages Act	—	155	329
Police Act	4,415	5,496	7,470
Prevention of cruelty to Animals Act	156	171	—
Punjab Motor-Vehicles Taxation Act,	4,602	5,635	5,592
Hackney-Carriages Act	147	171	690

(*Source* : Superintendent of Police, Ludhiana, and Chief Judicial Magistrate, Ludhiana)

(b) History and Organisation of Police

(i) History of Police

The political conditions created in the Punjab on the deterioration of the Mughal rule and the repeated invasions of Ahmed Shah Abdali from the north-west in the latter half of the 18th century called for some satisfactory arrangement for security of life and property. This was done under the '*Rakhi*' system envolved by the Sikh Misls who assumed political control of the areas conquered by them. The system thus organised, though far from satisfactory according to modern standards, suited the needs of the people and the times. The chiefs or the *misaldars*, though vested with uncontrolled power, knew well how essential peace and order were for the prosperity of the people under their control. Even though there was no written Penal Code, the whole procedure was simple and direct. Quite often the Sardar squatted on the ground among his subjects and decided the cases on the spot. Sturdy common sense was applied for the settlement of disputes. The rough and ready system of criminal justice under the Misls suited the people in the peculiar conditions that prevailed in the country. Infact, the closely knit village community served as an instrument for the maintenance of law and order. The sense of insecurity, scanty means of communications and the need for resistence to wandering groups of robbers had made every village self-reliant. The age old Panchayat system served the purpose of local Government. The panchayat maintained law and order, restrained the stronger and protected the weaker. The functioning of the village panchayat, as an effective agency in the maintenance of law and order has been praised by many foreign visitors to the Punjab before the advent of the British rule.

The method of summary trial and prompt punishment was continued by Maharaja Ranjit Singh. Under his benevolent rule special steps were taken to establish law and order. His personal vigilance and constant attention to the prosperity of the people seem to have been responsible for the success of rough and ready system. It is all the more remarkable when it is noted that there was no organised police force for the purpose nor any restrictions were imposed on the possession of arms. The undisturbed peace throughout his rule appeared to be the result of willing obedience of his subjects.

During the anarchy after the death of Maharaja Ranjit Singh, highway robbers and dacoits flourished in the Punjab 'as storm birds of a tempest tossed society'. The Board of Administration set up after the annexation of the Punjab in 1849 had to face a serious problem of law and order so sessential for the existence of an orderly society. A well-organised police force had, therefore, to be urgently created to deal properly with highway robbers and dacoits who were ravaging the countryside. The police organisation under

the Board comprised two wings, namely, the preventive Police with a Military Organisation, and the Detective Police with a Civil Organisation. The Military Police consisted of foot and horse. Some faithful troopers of the Lahore Darbar had been enlisted under four British Officers designated as Police Captains. The de'ective Civil Police was sub-divided into regular establishment paid by the State, the city watchmen ; and the rural constabulary paid by the people. In the Cis-Satluj territories including Ludhiana district, the duties of organised police were taken over by the Four Sikh Local Corps raised for the purpose in 1846 and a Regiment of irregular cavalry. The rural constabulary formed the lowest but by no means the least important grade. One of the earliest measures taken by the Board was the organisation of this important body throughout the villages.

The vigorous and vigilant efforts or the Board were largely successful in laying the foundation of a well-organised Police system in the Punjab. To the people harassed by persistent lawlessness and two wars the newly established Police stystem brought much needed relief. The stern measures taken to restore settled conditions in the early stages greatly helped reduce crime and enjoyed the support of vast numbers of society. The Police organisation, though rough and rudimentary in character, was responsible for the restoration of peace and order and general respect for law.

The broad frame work of the Police Organisation in the Punjab under the Board was continued during the regime of the Chief Commissioner which replaced it in 1953. The force was, however, enlarged and re-organised according to requirements of the situation and incidence of crime.

On the restoration of normal conditions after the Great Revolt of 1857 the question of reform and reorganisation of the police in the Punjab engaged the attention of the Government. It was, however, acknowledged that the early Police Batallions had made a commendable contribution for the maintenance of peace and tranquility in the province in the face of trying circumstances. In 1860 radical reforms were initiated in the police establishment in order to reduce the expenditure and to reorganise it in a more effective manner. Certain changes on the new lines had already been introduced in some districts as an experimental measure. The far-reaching reforms proposed under the Indian Police Act V of 1861 were welcomed by the Punjab Government and were implemented without any difficulty or delay.

The Act was a landmark in the history of Police Organisation throughout India. It put an end to the different systems by which the police in various parts of India were governed at the time. The Act, as stressed in the preamble, was enacted for the primary purpose of making the police force throughout British India an effective instrument in the prevention and detection of crime.

To begin with, the operation of the new Act was limited to the territories to the eastern side of Indus. A regular Police Department was established as a Separate Department of Government. In each district, the Organisation was placed under the control of a Superintendent of Police. The subordinate grades were designated as Inspectors, Deputy Inspectors, Sergeants and Constables. The *thana* Police and the city watchmen were fused into one and organised as a regular constabulary. The subsequent growth and development of police system in the Punjab more or less followed the salient features of the Act of 1861. Suitable modifications and alterations have been made according to the requirements of the times but the main principles have been followed for the last over 100 years.

There was a marked decrease in crime in 1863 as compared with 1859. Presumably the improved results had accrued from the new reforms effected in 1861. In 1875 special attention was paid to improve the general tone of the police force in the Punjab. Rules for the training and examination of probationers were adopted in 1876. In 1882 a competitive examination for recruitment to higher ranks was recommended. This may be regarded as the forerunner of the modern competitive system for the recruitment of candidates for superior police service. The training of the higher echelon was made as thorough as possible with the establishment of the Police Training School at Phillaur in 1891. The most important changes in the organisation of the police force were effected by the decision of 1894 to recruit a certain proportion of Assistant District Superintendents by open competition and the appointment in 1896 of Commissioners of Divisions as *ex-officio* Deputy Inspectors-General for the purpose of prevention and detection of crime. Unlike other provinces, the Punjab Government did not think it necessary to appoint a Committee to enquire into the working of the Police Organisation. But within a decade the law and order situation in the province took a turn for the worse and the Government was constrained to appoint a Committee under the presidentship of Mr. C.M. Tupper, C.S.I., in October, 1899. The main object was to strengthen the police administration with special regard to the state of crime, which had become serious in certain localities in the province. The recommendations of the Committee, however, could not be sanctioned because a new Commission to go into the Police Organisation on all-India level was appointed by Lord Curzon under the presidentship of Mr. Frazer in 1902.

Complaints of grave abuses in the working of the police and consequent deterioration in the judicial and general administration had necessitated the appointment of the Commission. The report of the Commission released in 1903 was hailed as a valuable document. The Government of India acknowledged the admirable character of the report. As a result of thorough investigation various useful suggestions were made to improve the working of the police

organisation. Among other reforms the discipline of the police was entrusted entirely to the Police Officers. The Deputy Commissioner (the District Magistrate) or the Commissioner was in no way to interfere with the internal administration of the Police force in the district. The District Superintendent of Police was to carry out the orders of the District Magistrate ; but he was not his Assistant in the sense the Assistant Collector was. The opening of higher ranks to Indians, even though in a very small number to begin with, attracted a better and more highly educated class of people with the result that more improvement in the efficiency and popularity of the police was soon discernible. In 1905 direct recruitment to the rank of Sub-Inspector was started.[4] The foundation of the Criminal Investigation Department, popularly known as C.I.D. was laid. For administrative purposes the province was divided into 3 ranges-eastern, central and western and the posts of Additional D.I.G.s were created in the C.I.D. and the Railway Police Branches.

As soon as extra heavy pressure on the police entalied by duties during World War I was removed, the Punjab Government set up in 1925 a Provincial Police Committee under the presidentship of Mr. O.F. Lumsden, I.C.S. (Retired). The terms of reference included the consideration of the strength of police establishment existing in each district, suggestions for possible reduction in the duties allotted to the police and adequacy or otherwise of the integrity of the force. The Committee found the existing strength of 10 constables at each rural police station grossly insufficient. It recommended that for an ordinary police station with 150 sq. miles of area that registered 75 cases a year, two Investigating Officers with a Head Constable Clerk and 12 Constables should

[4]. Towards the close of the 19th Century, the police force in the district was controlled by a District Superintendent of Police. In 1904, he was assisted by an Inspector and 15 Deputy Inspectors, and the strength of the police force was as under :—

Class of police		Total strength	Distribution	
			Standing guards	Protection and detection
District Imperial	..	391	29	362
Municipal	..	117	..	117
Total	..	508	29	479

(*Ludhiana District Gazetteer*, 1904, p. 217.)

be provided. The recommendation was implemented in respect of the majority of police stations. In towns with a population of 5,000 or more watchmen were recommended to be substituted by the regular policemen. The report made a comprehensive survey of the needs and requirements of the police force and its proper distribution. Its recommendations worked well upto the commencement of World War II in 1939.

The exceptional increase in the cases of burglary during 1938 was considered at a Police conference held at Lahore. It was of the opinion that burglaries could not be investigated through the agency of the Station House Officer (S.H.O.) alone and it was, therefore, essential to provide special staff to deal with the crime. The conference recommended the Organisation of the Central Investigation Agency as an integral part of the police force in each district. A separate Inspector as Incharge of the C.I.A. of each district was expected to cope with the cases of burglary as also with the murder problems. The conference recommended that with the object of encouraging public co-operation rewards for public assistance should be given more liberally. The gazetted officers and Inspectors were advised to collect village officials and hold meetings to encourage public co-operation.

The forties of the century were a period of great stress and strain for the police not only owing to the conditions created by World War II, but also because of the great political upheaval in the country. Secret preparation for 'Direct Action' further worsened the situation from the point of view of law and order.

The partition of the Punjab not only created an unprecedented problem of law and order but also completely paralysed the Police Organisation in the province. Apart from the administrative division of the Police personnel and assets the most disquieting factor in the process was the mass migration of members of certain communities from West to East Punjab and *vice versa*. The trickle of movement which had started before the actual partition as a consequence of communal disturbances very soon became a torrent immediately after the fateful 15th August, 1947. The wholesale transfer of communities was utterly unexpected and had been caused by the force of circumstances. The number of persons moving from one direction to the other exceeded the wildest calculations of the respective Governments, who were, therefore, found utterly unprepared for the greatest exodus in history.

Before the Government in the newly created province of the East Punjab could get into the saddle, it was literally overwhelmed with the inflow of refugees. The arrival of millions of persons into the East Punjab disrupted the whole administration and created a situation without any parallel. Large numbers of

refugees were completely demoralised on account of want and destitution. They were highly susceptible to crime. In the face of the critical problem prompt action had to be taken to restore law and order in the new State.

The police force had to bear the brunt of the after effects of partition and the trail persisted long afterwards. In the United Punjab the Muslims constituted aproximately 67 per cent of the total strength of the police and after their departure to West Punjab, the balance of barely 33 per cent of non-Muslim members of the force was called upon to deal with the situation the like of which had not been known to the history of mankind. The chaotic conditions of law and order were further aggravated by acute economic depression and unsettled conditions of life, which resulted in the wake of mass migration. The depleted police force had thus to perform a gigantic task and to combat heavy lawlessness in order to restore law and order in the new State.

Immediately after the partition measures were adopted to make up th serious deficiency in the police force ; new training centres for the recruits were opened and training facilities were enlarged at the Training School, Phillaur. On the restoration of normal conditions further steps were taken to put the police force on sound footing.

Under the new national set-up after Independence of the country, the duties of the police force have to be reorientated. They are no longer an engine of oppression and not merely to be looked upon with feelings of terror and horror. They have to assume the new role of the servants of the people and the guardians of law and order. The changed conditions called for a review of the needs and the problems of the police as well as re-orientation of their outlook, and administration. Accordingly, the State Government, in 1961, constituted the Punjab Police Commission under the Chairmanship of Shri Mehar Chand Mahajan, former Chief Justice of India, to enquire and report on the role of police in the context of democratic set-up consistent with the paramount need for the security of the State, measures for controlling meetings, demonstrations, police-public co-operation and cognate matters.[5]

(ii) **Organisation of police.**—For the purpose of police administration, the district falls in the Jullundur Range, which is under the charge of the Deputy Inspector General of Police, Jullundur. The district police is controlled by the Superintendent of Police who is assisted by 3 Deputy Superintendents of Police, 6 Inspectors, 46 Sub-Inspectors, 72 Assistant Sub-Inspectors, 160 Head Constables and 1,218 constables. Besides, the village watchmen and Chowkidars are in position in all such villages, which do not have any municipal or notified area committees. *Thikri pehra*, on voluntary basis is also carried out in rural areas. This arrangement is of immense help in controlling the crime against person and property.

5. Although the Report of the Punjab Police Commission, 1961, has not yet been released, its recommendations were out in May, 1962, and are being implemented by Government.

The strength of the police in the district, as it stood on November 1, 1966, is given below :

	Superintendent of Police	Deputy Superintendent of Police	Inspectors	Sub-Inspectors	Assistant Sub-Inspectors	Head Constables	Constables
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Civil Police							
Permanent	1	2	4	27	53	97	780
Temporary	—	—	—	—	—	—	—
Cracker Jack Force[6]	—	—	—	2	6	12	125
Emergency Force	—	1	1	7	12	42	240
Armed Police							
(1st, 2nd and 3rd Reserves)							
Permanent	—	—	—	1	1	7	64
Temporary	—	—	—	—	—	—	—
Prosecution Staff							
Permanent	—	—	1	9	—	2	9
Temporary	—	—	—	—	—	—	—
Total	1	3	6	46	72	160	1,218

The various police stations and police posts in the district are situated at the following places :—

Sub-Divisions/ Sub-Tahsil/ Tahsil	Police Station	Police Post
Ludhiana	Division No. 1, City Ludhiana	
	Division No. 2, City Ludhiana	Miller Ganj
	Division No. 3, City Ludhiana	

6. The Cracker Jack Force has been transferred to the Punjab Armed Police with effect from April, 1, 1967.

Sub-Division/ Tahsil	Sub-Tahsil	Police Station	Police Post
		Division No. 4, City Ludhiana	
		Division No. 5, City Ludhiana	Model town
		Sadar Ludhiana	Industrial Area (Division No. 6)
		Dehlon	Malaudh
		Sahnewal	
		Dakha	
Samrala		Samrala	
		Khanna	
		Khamanon	
		Machhiwara	
agraon		Jagraon	
		Raikot	Sudhar
		Sidhwan Bet	
Ludhiana	Payal	Payal	Doraha

Besides the above, there is a Government Railway Police station at Ludhiana.

Civil Police.—The Civil Police is utilised for duty at the district headquarters and the various police stations. There are 17 police stations in the district, of which 5 are in urban areas and 12 in rural areas., Each police station[1] is under the charge of a police officer, known as the Station House Officer, assisted by one or more Assistant Sub-Inspectors, Head Constables, 1 Moharrir Head Constable as Station Clerk, 1 Constable as Assistant Moharrir or Assistant Station Clerk and a number of Constables. It is the duty of the Station House Officer to keep the law and order situation well under control in his jurisdiction and investigate the offences occurring in his jurisdiction.

1. *See* pages 397—98, of Chapter 'General Administration'.

Punjab Armed Police and Mounted Police.—One P.A.P. reserve is stationed in the district for anti-dacoity operations. No mounted police is sanctioned for the district.

Prosecution Staff.—Previously the prosecution staff was drawn from the regular police force of the district. The selected personnel had passed the law examination from the Police Training School at Phillaur, but this wing of the force has been re-organised and officers with legal qualifications are directly recruited for it.

The Prosecution Branch is under the charge of a Prosecuting Inspector at the district level.

On November 1, 1966, the prosecution staff comprised 1 Inspector, 9 Sub-Inspectors, 2 Head Constables and 9 Constables.

Criminal Investigation Department.—The C.I.D. staff in the district consists of 1 Inspector, 4 Sub-Inspectors, 5 Assistant Sub-Inspectors, 8 Head Constables and 16 Constables. They have their office at Ludhiana.

Police Wireless Station.—The Police Department has a network of wireless communication system, with headquarters at Chandigarh. It connects (i) all district headquarters and the Police Training School at Phillaur to Government headquarters at Chandigarh, (ii) one district to another, and (iii) the border police to border districts headquarters and to Chandigarh. In addition to the above mentioned fixed stations, a number of mobile wireless stations are also provided as and when needed.

There is one such Police Wireless Station in the Police Lines at Ludhiana for receiving and transmitting messages from and to places connected with the system. It remains open all the 24 hours by shifts. It is provided with a mobile wireless set, fitted in the pick-up van, for anti-dacoity and other emergencies in rural areas.

The staff consists of 1 Sub-Inspector, 4 Assistant Sub-Inspectors and 2 Head Constables. All of them are trained in wireless techniques.

Railway Police.—It is not allotted to any district in particular; but is a part of a separate State organisation working under the Assistant Inspector General, Government Railway Police, Punjab, with headquarters at Patiala. The circles of the Railway Police are formed according to the sections of railway lines in which they control crime committed in railway trains and within the railway premises.

The headquarters of the Railway Police, which controls crime on stations situated in Ludhiana district, are at Ludhiana.

There are three out-posts in Ludhiana district where the staff posted is as under:

Name of the out-post	Staff strength		
	Assistant Sub-Inspectors	Head Constables	Constables
Out Post, G.R.P., Jagraon	—	1	2
Out Post, G.R.P., Khanna	—	1	2
Out Post, G.R.P., Phillaur (attached to G.R.P., Ludhiana, though it falls in the jurisdiction of Jullundur district)	—	1	4

Excise Police Staff.—It consists of 1 Sub-Inspector, 2 Head Constables and 25 Constables, who are on deputation from the main strength of the Police Department.

Village Police.—The institution of *Chowkidari* is very old. Even in the remote past, every village had one such official who used to receive as his remuneration a share from each cultivator's produce. This remuneration was paid by the community and was reckoned on the basis of the number of hearths.

The village Chowkidar formed the lowest rung of the police organisation. Before the abolition of *zaildari* and *suffaidposhi* in 1948, Chowkidar assisted these officials in maintaining law and order in the village and in guarding cultivator's produce.

At present, the Chowkidars form a regular class and are paid out of the levy called *Bash* assessed from the landowners of villages, which do not have any municipal or notified area committee. The institution has been very useful for watch and ward in the past; but the utility of the system has diminished to some extent due to the general apathy of the villagers towards rendering assistance to the administration for keeping watch and ward. The people are generally averse to *thikri pahara* and have an impression that the maintenance of law and order is the responsibility of the police organisation.

There is very little co-operation from the people in village patrolling. The Punjab Gram Panchayat Act, 1952, has, however, authorised panchayats to raise their own voluntary force for the maintenance of law and order.

Home Guards.—The need for constituting a voluntary organisation to be made use of during emergencies was, however, keenly felt. Consequently, the Home Guards Act of 1948 was passed, empowering the Government to raise on voluntary basis a disciplined and self-reliant force of citizens, known as Home Guards, in order to supplement the ordinary police force in the maintenance of law and order and other essential services during emergencies and providing relief in the event of natural calamities like, flood, fire, etc.

In 1950, a voluntary organisation under the name of Home Defence was started. Only the members of its administrative and instructional staff were government paid. In Ludhiana proper, training was given to the students and the people in general.

The organisation was given a new name in 1960 when it was re-christened as the Punjab Volunteers Corps. The Civil Defence staff was also adjusted in the new set-up.

It was re-organised in 1963 under the nomenclature of the Punjab Home Guards. The Home Guards are generally deployed to assist the police in the maintenance of law and order and other internal security measures. The technical and important Civil Defence services are also manned by the Home Guards during the emergencies.

The Home Guards are imparted training in Civil defence, police duty, first-aid, fire fighting, rescue and drill and weapon training.

During the Pakistan aggression of September, 1965; 1556 Home Guards of this district were on duty to assist the police and to man the Civil Defence services. As many as 810 Home Guards were also called out to assist the police during the Punjabi Suba agitation in March, 1966.[8]

At the district level, there are three wings of the Home Guards, viz., (i) Urban Wing, (ii) Rural Wing, and (iii) Civil Defence Wing, under the overall charge of the District Commander, who is assisted by the District 2 I/C Home Guards. Commander Training Centre Rural Wing, and District 2 I/C Civil Defence. An Honorary Medical Officer conducts medical examination of the Home Guards. The Home Guards are trained to man the essential services of fire brigade, water-supply, electricity and telephone operator during emergency. The Fire Officer, Ludhiana, is working as the Honorary Fire Officer to supervise and impart training in fire fighting to the Home Guards.

8. Ludhiana Home Guards won the 2nd Prize in the State Ambulance meet in November, 1966 by defeating the Punjab Police which was holding this position for the last twenty years.

One Coy. of Home Guards has the strength of 110, comprising 1 part-time Coy. Commander, 3 Platoon Commanders, 3 Platoon Sergeants, 9 Section Leaders and 94 volunteers. The Coy. Commander, Pl. Commanders, Pl. Sergeants, Section Leaders are paid instructor allowance in addition to the parade allowance at the rate of Rs. 50, Rs. 30, Rs. 15 and Rs. 10 per month, respectively. The volunteers are called out for weekly parade for a period of 2½ to 3 hours and are paid at the rate of Re. 1 per parade. In case of call out of Home Guards for duty, etc., they are paid Rs. 2.50 per day within the municipal limits in the case of urban wing and within the police station area in case of rural wing. These volunteers are also paid Rs. 1.50 per day as messing charges if they go out of their respective jurisdiction.

(i) Urban Wing

In this wing, the District Commander is assisted by the District 2 I/C Home Guards. The wing comprises 18 units of 110 volunteers each, 15 units at Ludhiana, 1 unit at Khanna and 2 units at Jagraon. Out of these 7 units have lady sections of 11 volunteers each.[9] Against the authorised strength of 1980, the posted strength was 1,748 on March 31, 1966.

(ii) Rural Wing

In this wing, the District Commander is assisted by the Commander, Training Centre Rural Wing and his instructional staff consisting of 2 Senior Instructors and 5 Instructors. The wing comprises 10 units, i.e. a unit each for the ten blocks[10]. Against the authorised strength of 1,100, the posted strength was 1,023 on March 31, 1966. The volunteers are called out for forty days basic training in the Training Centre at Ludhiana.

(iii) Civil Defence Wing

In this wing, the District Commander is assisted by the District 2 I/C Civil Defence and Civil Defence Instructors. They impart training in civil defence measures to the Civil Defence services and the general public by holding training classes and civil defence exercises.

The District Commander, who is a qualified technical officer for civil defence measures, also renders all technical assistance to the Deputy Commissioner (District Controller of Civil Defence) in organising civil defence measures in the district.

One of the Instructors of the Civil Defence is in charge of Civil Defence Stores and is responsible for the proper maintenance, etc., of the same. These

9. A lady unit has since been raised at Ludhiana in place of lady sections in 7 units. Besides, there is a section of lady volunteers at Jagroan and Khanna.

10 The Government has sanctioned the appointment of 10 part-time Coy. Commanders and 30 part-time Platoon Commanders at Rs. 50·00 and Rs. 30·00 per month, respectively with effect from September 1, 1966.

stores are issued to the different posts and centres of the Civil Defence at the time of need under the orders of the Director, Civil Defence, Punjab.

The Civil Defence volunteers are not paid any allowance unless they are called out for duty or training under orders of the Distrct Civil Defence Controller (Deputy Commissioner). Normally, Home Guards are called out for conducting civil defence rehearsals and exercises for which they are paid allowances in accordance with the rates fixed for Urban Wing of the Home Guards out of the Home Guards funds.

Jails and Lock-ups

The institution of jails, as we know them now, is essentially of British origin and was a part of the judicial system introduced by them. Under the British, the jails formed punishing cells and, on release, there was generally little improvement in the mental attitude of the prisoners whose approach to society remained unchanged. They remained emotionally unbalanced and continued to be a menace to society.

After Independence, tremendous change has been effected in the working of the jails which now function as reformatories. Good care is taken of the diet, health, education and emotional make-up of the prisoners. An endeavour is made to enable them to earn their livelihood by labour on release and to become useful and respectable citizens.

There is a District Jail at the headquarters. There is no sub-jail or judicial lock-up in the district.

The District Jail.—It is situated at Ludhiana near the Christian Medical College on the south-eastern side of the city. It covers an area of about 30 acres, including its garden and farm occupying 16 acres 2 *kanals* and 2 *marlas.* Built in the 19th century, the structure of the jail was originally *kachcha.* After independence, however, many improvements have been effected and most of the walls have been made pucca. The main gate, the administrative block and the residential lines have been given a new look. The original capacity 325 prisoners has been increased, after the partition of 1947, to accommodate 500 prisoners.

The strength of staff as on November 1, 1966, consisted of 1 Superintendent Jail, 2 Deputy Superintendents, 2 Assistant Superintendents, 2 Sub-Assistant Superintendents 1 Assistant Surgeon , 1 Dispenser, 2 Welfare Officers, 4 Matrons, 1 Nurse-cum-Matron, 1 Weaving Master, 1 Embroidery Instructress, 2 Teachers, besides 1 Accountant, 6 Clerks and 2 Store-Keepers. Moreover, there are 3 Head Warders and 50 Warders.

The total admissions during the year, average daily population and maximum population on any one day during the year of the District Jail, Ludhiana, for the period 1962 to 1965, are shown in the following table:—

		1962	1963	1964	1965
Total admissions during the year		5,220	5,161	3,927	4,082
Average daily population					
Convicts	Male	264.63	267.86	265.78	220.29
	Female	74.50	66.26	54.40	47.46
Under-trials	Male	173.43	218.82	188.84	187.36
	Female	4.64	5.28	5.95	3.82
Civil	Male	0.69	0.43	0.26	0.02
	Female	—	—	—	—
	Total	517.89	558.65	515.23	458.95
Maximum population on any one day during the year		590	627	587	573
Total admissions during the year		5,220	5,161	3,927	4,082

(*Source*: Superintendent, District Jail, Ludhiana)

The number of convicted prisoners released on different grounds during the period 1961 to 1965 is given below :

Convicted Prisoners Released, 1961—65

	1961	1962	1963	1964	1965
On appeal	287	346	289	211	74
On expiry of sentence	755	367	779	788	508
Under remission system	336	290	282	169	152
By order of Government on medical grounds	2	5	—	1	—
By order of Government on other grounds	1	32	28	45	45

(*Source* : Superintendent, District Jail, Ludhiana).

Educational and Recreational Facilities

The daily routine starts with the morning prayer by all the inmates of the jail. Thereafter they do physical exercise, and are sent to the factory for work. After finishing their allotted jobs, they play in-door and out-door games like Volley-ball, *Kabbadi*, tug of war, etc., facilities for which are provided.

The whole-time trained teachers—one for men and the other for women—are provided for imparting education to the prisoners. During the year 1965, 412 men and 80 women prisoners received education.

A library with 683 books in stock (in 1965), has also been provided in the jail where books on different subjects are available. The prisoners draw books according to their own choice. As may as 1,752 books were issued during 1965.

For the recreation of the prisoners, film shows are arranged through the Public Relations Department. A dramatic club is also run by the prisoners. It is provided with necessary musical instruments, curtains, dresses and stage equipment. Dramas and variety shows are arranged from time to time.

A canteen is run by the prisoners on co-operative basis, under official supervision. The prisoners can purchase authorised articles like *gur*, oil, sugar, sweets vegetable ghee, cigarettes and *bidis*, tooth-paste, boot-polish, underwears, towels, etc. Tea is also made available to them at their own expense. The purchases are made through coupons which are issued to the prisoners against their cash-deposits. The profits earned from the canteen are again spent on the welfare of the prisoners.

The national and religious festivals like the Republic Day, Independence Day, Guru Gobind Singh's Birthday, Shivratri, Baisakhi, Dussehra, Dewali, Guru Nanak's birth day, Lohri, etc., are celebrated jointly by all the inmates of the jail. On important days, a sweet dish and sweetmeats are given to them.

Reformation and Correction

Reformation and rehabilitation of the prisoners as good citizens is the main object of the jail institutions. It is endeavoured to be achieved through wholesome education and sympathetic attitude on the part of the jail authorities. Two Welfare Officers, one for men and the other for women, are attached to the jail. All the newly admitted prisoners are sent to the reception centres, separate for men, and women and orientation talks are given to them by the respective Welfare Officer. Thereby they are acquainted with the jail regulations which they are expected to observe. Their rights, duties and responsibilities in the prison are explained to them.

Newspapers and useful journals are subscribed for the benefit of the prisoners. Important news items are read out to the illiterate by the Teacher during school hours. Lectures are arranged on moral, social and cultural topics, as also on civics and hygiene, for the welfare of the prisoners.

Separate radio-sets for men and women sections of the jail are provided for the recreation of the inmates.

The elected panchayat[11] of the prisoners looks after their interests. It draws the ration from the jail store and supervises the cooking and distribution of food[12].

Medical Aid

The jail medical staff consists of whole-time Assistant Surgeon and a Dispenser. The Chief Medical Officer of the district is the part-time Medical officer of the Jail. A hospital, with 25 beds and other necessary equipment, is provided in the jail. Adequate supply of medicines for the treatment of the sick is ensured. Serious cases, requiring consultation and treatment by a specialist, are referred to the local Civil Hospital, Rajindra Hospital, Patiala, and V.J. Hospital, Amritsar.

Care is taken to maintain a good standard of sanitation and cleanliness in the jail.

Industrial and Vocational Training

To provide gainfull occupations and teach some suitable crafts to the prisoners the industries that are taught in the jail manufactory are : Carpentry, Textile, *Niwar* weaving, Phenyle making, Washing-soap making, Re-caning of chairs, *munj ban* twisting, *Durries* weaving, Woollen-blankets making and Embroidery (in women section).

Women Section

Of the two wings of the jail for men and women, the latter was started after the partition of the Punjab to accommodate women prisoners, re-patriated from the Women Jail, Lahore, in West Pakistan. This is the only women Jail in the Punjab and convicted women prisoners, whose sentences range from three months to life imprisonment, are received from all districts of the State[13].

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11. There is no separate panchayat for the women section of the jail. The members of the panchayat, i.e., *panches* and the *sarpanch* are elected only from amongst the men prisoners.

12. The food for all the prisoners, both men and women, is cooked in the general kitchen provided in the male section of the jail.

13 The women prisoners from Delhi State are serving their sentence in this jail.

The ground area of this section is roughly 180′ x 180′. It comprises of two large barracks, three cells, hospital ward, a work-shed, a school room, one embroidery section and a small dispensary. All these structures are enclosed by a 12′ high wall from all sides and the entire section is separated from the main jail by a 16′ high wall. Entrance to this section is quite separate from that of the main jail. The women prisoners are thus altogether segregated from the male population of the jail.

The average daily population of women prisoners was 51·25 in 1965 as against 60.35 in 1964.

Under the Superintendent, District Jail, there is a separate women staff to assist him in the management and control of the women section. On the executive side, there is a Lady Assistant Superintendent and 4 Matrons to look after the custodial aspect and watch and ward. There is a Lady Teacher for imparting literacy to the uneducated and an Embroidery Instructress for imparting training in embroidery work and other handicrafts, a Lady Welfare Officer, and a Lady Health Visitor for giving instructions in midwifery and looking after the children of women prisoners in separate building called the 'Nursery'. Medical needs of this section are attended to by a part-time Lady Doctor and a Lady Dispenser of local Civil Hospital, the Chief Medical Officer of the district being the part-time Medical Officer of the Jail as a whole.

The women prisoners are allotted by the Lady Assistant Superintendent their daily tasks which consist of handicrafts such as *niwar*-making, knitting of socks and jerseys, hand-embroidery, basket-making, leather-work, and preparing pickles, syrups and squashes. The aged and the less intelligent are put on spinning work. The Embroidery Instructress teaches the various handicrafts.

The Welfare Officer gives orientation to every newly-admitted prisoner which means explaining to the new comer as to how she will live in the jail, what is expected of her according to the jail rules, and what privileges she is entitled to. The Welfare Officer helps inmates in solving some of their personal problems and keeps a liaison between the inmate, her relatives and the officers. She organises programmes of physical training, cultural activities and celebration of national and religious festivals by prisoners.

The Lady Doctor of the local Civil Hospital visits the section occassionally and examines the newly-admitted prisoners to ascertain the state of health on admission and prescribes necessary medical treatment and diet according to the nature of the case. She also examines prisoners reporting sick and prescribes necessary treatment by hospitalising them, if necessary. The Lady Dispenser dispenses medicines prescribed by the Lady Doctor.

Nursery for Children of Women Prisoners

To bring up the children of women prisoners away from the influence of criminals so as to make them good citizens when grown up, there is a nursery situated outside the jail. It was started in 1962 and provides accommodation for 25 children.

The Nurse-cum-Matron takes charge of all children of women prisoners and looks after their various needs of washing, bathing, clothing, diet, recreation and education. She is assisted in her work by an attendant and a sweepress.

The children below the age of 8 years are looked after in the nursery. Those grown up are admitted in the local schools for primary education and their school fees are paid out of the prisoners welfare fund. The writing material, toys, interesting charts, and books are provided to the children. In-door and out-door games are also provided to them out of the welfare fund.

Jail Industries

The industries carried on in the District Jail, Ludhiana, comprise carpentry, textile, *niwar*, phenyle making, country soap, re-caning chairs, tailoring and *munj-ban*. The average number of prisoners empoyed, total production and gross profit, during the period 1961-65 are given below :

Year	Average number of prisoners employed	Total production (Value)	Gross profit	Cash profit
		Rs.	Rs.	Rs.
1961	122·45	3,01,068	60,078·18	61,921·92
1962	134·85	3,75,632	78,175·86	81,308·47
1963	110·27	2,67,719	73,420·77	64,049·79
1964	141·76	2,80,391	1,06,853·20	83,736·25
1965	124·70	2,39,940	..	..

(*Source* : Superintendent, District Jail, Ludhiana)

Official and Non-Official Visitors

The visits by the official and non-official visitors prove very beneficial to the jail administration. These create a healthy atmosphere among the inmates who realise that, in spite of their being behind the bars, they are properly looked after and cared for and infuses a feeling of confidence among them which leads to better discipline. Non-official visitors are appointed by Government. A separate register is maintained where the recommendations made by them are entered. These recommendations are duly considered by the jail authorities.

District Crime Prevention Society.—The Punjab Crime Prevention Society replaced the erstwhile Punjab Prisoner's Aid Society after the partition. It was established with the object of checking the commission of crime and reformation of prisoners and ex-prisoners so that they might become useful citizens. Under the control of this central organisation, the activities at district level are carried on by the District Crime Prevention Society, Ludhiana.

Since its inception in 1958, the Society at Ludhiana has done commendable work at the District Jail, Ludhiana. It has provided two radio-sets for the entertainment of prisoners. Besides, the society helps the needy and poor prisoners by providing elementary needs like soap, oil and other toilet articles, etc. Sweetmeats are distributed amongst the prisoners on the Independence and Republic Days.

The resources of the District Crime Prevention Society are, however, quite meagre. These consist of funds raised from the relatives of the prisoners at the time of their interview, subscriptions from the members of the society and donations from public. Paise ten are charged from the relatives of each prisoner who seek interview with them. The daily income from the source comes to about rupees 3 to 5.

District Probation Officer, Ludhiana.—The officer is required to function under the Probation of Offenders Act, 1958, a Central enactment, under which any offender, who is held guilty of any offence not punishable with death or imprisonment for life, can be released on probation of good conduct with or without supervision of the Probation Officer upto a maximum period of three years. In case of an offender below 21 years of age, the courts have been restricted not to pass any sentence of imprisonment unless such an offender is considered undesirable for release on probation. It has been further laid down in the Act that for the purpose of satisfying itself whether it would not be desirable to release on probation an offender (under 21 years of age), the court shall call for a report from the concerned Probation Officer and consider it before the award of sentence.

An offender can be released on probation with or without supervision of the Probation Officer, depending on the nature and circumstances of the cases and character, antecedents and the possibility of the future reformation of the offender. The probation period and the conditions of the bond can be varied in the interest of the offender or the public so that the maximum period of probation shall not exceed three years from the date of the original order. If there is any breach of conditions, etc., the probation benefit can be withdrawn and the original sentence awarded to the offender by the court on the report of the Probation Officer or otherwise. But, where the failure is for the first time and without prejudice to the continuance in force of the bond, a penalty not exceeding Rs. 50 can be imposed.

In 1962, the Probation of Offenders Act, 1958, was enforced in the first phase in seven districts of the erstwhile Punjab State with comparatively lesser incidence of crime. In 1966, the Act was extended to some other areas including Ludhiana district.

Ludhiana district was covered under the Probation of Offenders Act on May 1, 1966 and the officer started functioning from July, 1966. He is under the administrative control of the Inspector-General of Prisons, Punjab. The Chief Probation Officer attends to the probation work in the State under the guidance and control of the Inspector-General of Prisons, Punjab.

The District Probation Officer has to maintain all types of records of the probation work in the district. He is to supervise the probationers placed under this charge and to submit their monthly progress reports to the courts. He is to move the courts to vary the conditions of the bonds of the released persons for tightening or relaxing them in certain cases. He is to assist the probationer for his rehabilitation in society so that he does not revert to crime. Whenever possible, he is to endeavour to secure for the probationer training facilities and employment opportunity, etc.

(d) Organisation of Civil and Criminal Courts

Since the separation of the executive from the judiciary in the State from October 2, 1964, the administration of both civil and criminal justice in the district is controlled by the District and Sessions Judge, Ludhiana.

Civil Justice.—On the civil side, the District and Sessions Judge, Ludhiana, is assisted by the Additional District Judge, Ludhiana, Senior Sub-Judge, Ludhiana and four Sub-Judges—three 1st Class posted at Ludhiana and one 2nd Class posted at Jagraon. The Sub-Judge posted at Jagraon also visits Samrala for ten days in a month.

The civil courts try all sorts of cases of civil nature upto the powers with which the Senior Sub-Judge and each of the Sub-Judges have been invested.

The Senior Sub-Judge and the Sub-Judges are invested with magisterial powers and they are allotted some criminal work also. The sub-Judges, 1st Class and Sub-Judges 2nd Class have been given powers of Judicial Magistrate, 1st Class and Judicial Magistrate, 2nd Class, respectively.

Additional District Judge, Ludhiana.—On the civil side, the Additional District and Sessions Judge is known as the Additional District Judge and he hears appeals against the judgements and decrees of Sub-Judges of all Classes upto Rs. 10,000 and hears cases under the Land Acquisition Act, 1894, and Hindu Marriage Act, 1955 (Act 25 of 1955).

Senior Sub-Judge, Ludhiana.—He is the appellate authority in Small Cause cases of money suits not exceeding Rs. 100, land suits not exceeding Rs. 250, and unclassed units not exceeding Rs. 500. He is also a Subordinate Judge, 1st Class and as such can hear suits of any value. He is Rent Controller under the East Punjab Urban Rent Restrictions Act, 1949. He can try cases under the Guardian and Wards Act, 1890, and Provincial Insolvency Act, 1920. He is Commissioner under the Workmen's Compensation Act, 1923, and Payment of Wages Act, 1936. He acts as Tribunal under the Displaced Persons (Debt Adjustment) Act, 1951. He is a member of the Tribunal constituted under the Defence of India Act, 1962. He is a Judge of the Small Cause Courts under the Provincial Small Cause Courts' Act, 1887.

He hears transfer applications in panchayat cases, revision applications under the Punjab Gram Panchayats Act, 1952. He can hear applications under the Indian Succession Act, 1925, and disposes of cases under the Hindu Marriage Act, 1955. Besides, he is incharge of the process serving establishment.

Sub-Judges, 1st Class.—All the Sub-Judges are Subordinate Judges exercising jurisdiction to try suits of any value. They are Rent Controllers and also try cases under the Hindu Marriage Act, 1955.

Sub-Judge, 2nd Class.—With the separation of the judiciary from the executive, in 1964, the Senior Sub-Judge and the Sub-Judges, 1st Class have been invested with the powers of a Judicial Magistrate, 1st Class.

The statement below shows the number and nature of cases tried by the civil courts in the district during the period from 1956 to 1965 :

Nature of cases tried	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
Civil suits ..	1,735	2,106	2,397	2,284	2,415	2,181	2,307	2,142	2,031	2,270
Execution cases ..	1,401	1,293	1,639	1,896	1,724	1,935	1,915	1,585	1,871	2,043
Guardian cases ..	37	35	40	60	34	38	26	25	24	13
Succession Act cases ..	133	117	204	173	160	59	43	109	125	1
Workmen's Compensation Act	1	13	16	177	26	29	23	16	26	46
Payment of Wages Act ..	22	19	28	35	19	102	52	53	78	74
Rent Restrictions Act ..	599	621	749	813	722	885	667	684	626	756
Hindu Marriage Act ..	117	121	97	101	118	130	178	132	121	126
Panchayat Revision ..	47	51	46	43	32	31	55	24	37	20
Miscellaneous ..	701	686	1,135	986	1,150	1,673	1,832	890	1,566	1,386

(*Source* : Senior Sub-Judge, Ludhiana.)

Criminal Justice.—On the criminal side, the District and Sessions Judge, Ludhiana, is assisted by the Additional Sessions Judge, Ludhiana, the Chief Judicial Magistrate, Ludhiana, and 6 Judicial Magistrates—5 posted at Ludhiana and 1 posted at Samrala.

With the separation of the judiciary from the executive, powers of the District Magistrate, on the criminal side, have been vested in the Chief Judicial Magistrate under the control of the District and Sessions Judge. The Chief Judicial Magistrate supervises the criminal judicial administration of the district. He allots the police stations to the Judicial Magistrates with the approval of the District and Sessions Judge. Usually, the jurisdiction of a Judicial Magistrate extends to 3 to 4 police stations.

The Chief Judicial Magistrate and Judicial Magistrates deal with all types of cases relating to crime except security cases. All Judicial Magistrates try cases under the Indian Penal Code , Punjab Excise Act, 1914, Essential Commodities Act, 1955 and other special Acts relating to their police stations. The Chief Judicial Magistrate is vested with powers to try summary nature cases. All criminals apprehended by the police are produced before the Judicial Magistrate in whose jurisdiction the criminals may have been apprehended or in whose jurisdiction the crime may have been committed.

After investigation, the challans are put in by the police in the courts of Judicial Magistrates who also act as Magistrates and watch the investigation of criminal cases. A case generally takes two months for trial but cases of inter-district or inter-state nature may extend even upto six months or so.

The Judicial Magistrates have also been vested with the powers of Sub-Judges with varying jurisdiction.

On the separation of the judiciary from the executive, cases of security for keeping the peace and security for good behaviour under Criminal Procedure Code are tried by the following courts :—

Sub-Divisional Magistrate, Ludhiana	..	Cases relating to Ludhiana Tahsil
Sub-Divisional Magistrate, Jagraon	..	Cases relating to Jagraon Tahsil
Sub-Divisional Magistrate, Samrala	..	Cases relating to Samrala Tahsil

The Sub-Divisional Magistrates are also called upon to perform executive functions in addition to the trial of above types of cases.

Panchayat Adalats.—Petty criminal judicial cases relating to minor thefts, trespasses, encroachments on public property, public nuisance and damages to property of value not exceeding Rs. 250, etc., are entrusted to Gram Panchayats under the Punjab Gram Panchayat Act, 1952. Besides, the panchayats have also been empowered to try judicial cases under various sections of the Indian Penal code, etc. e.g., in matters concerning issue of summons, production of documents, oath and affirmation by a public servant, promulgation of orders, etc. The panchayats can also try cases under the Punjab Vaccination Act, 1953 section (16), the Cattle Trespass Act, 1871, (sections 24 and 26), the Punjab Primary Education Act, 1919 (sections 13 and 14), the Northern India Canal and Drainage Act, 1873 (section 70), the Punjab Weights and Measures Act, 1941 (sections 25 to 33), the Punjab Juvenile Smoking Act, 1918 (sections 3 and 4), the Public Gambling Act, 1867 (sections 3, 4 and 7), the Prevention of Cruelty to Animals Act, 1890 (sections 3 to 7), the Indian Forest Act, 1927 (sections 26 to 33), and the Punjab Land Preservation Act, 1900 (section 19).

On civil and revenue judicial side, the panchayats can try suits for the recovery of movable property or the value of such property, suits for money or goods due on contracts or price thereof, suits for compensation for wrongfully taking or damaging movable property, and suits mentioned in clauses j, k, l and of sub-section 30 of section 77 of the Punjab Tenancy Act, 1887. The pecuniary limits of panchayats with ordinary powers is Rs. 100 in criminal cases, Rs. 200 in civil cases and Rs. 100 in revenue

cases whereas this limit is to Rs. 200 to Rs. 500 and Rs. 200, respectively, for panchayats with enhanced powers.

The provisions of the Code of Criminal Procedure, the code of Civil Procedure and the Indian Evidence Act do not apply to the proceedings before a panchayat except to the extent mentioned in the Punjab Gram Panchayat Act, 1952.

Petty cases of criminal nature are entrusted to the Gram Panchayats under the Punjab Gram Panchayat Act, 1952. The panchayats being elected bodies, however, generally do not consist of persons having adequate knowledge of law and usual formalities of the procedure are generlly conspicuous by their absence in the trial of cases by the panchayats.

The judicial work done by the panchayats during 1959-60—1965-66 is shown in the Appendix at page 416.

Revisions against the decisions of the panchayats are heard by the Judicial Magistrates to whom the powers are delegated by the Chief Judicial Magistrate.

The statistics regarding the different types of cases tried by the criminal courts during the period 1956 to 1965 are given below :

Year		Regular cases	Security cases	Summary cases
1956	..	22,98	876	11,234
1957	..	3,186	913	13,242
1958	..	2,859	1,213	16,594
1959	..	3,145	1,401	16,151
1960	..	3,114	1,558	16,347
1961	..	3,475	1,756	11,317
1962	..	4,199	1,988	11,747
1963	..	4,322	1,831	17,766
1964	..	4,527	2,074	11,765
1965	..	5,367	2,502	9,932

(*Source* : Chief Judicial Magistrate, Ludhiana.)

(e) **Bar Associations.**—Bar Associations have been established in various tehsils of the district in order to encourage intensive study of law, to promote and maintain the higher standard of professional conduct, to protect and promote the interests of the lawyers, to make a critical appraisal of the existing laws and to discuss the various legislative measures enacted from time to time and their implications.

The District Bar Association, Ludhiana, was already in existence about the beginning of the present century. Its strength in 1965 was 184. Besides, there are separate Bar Associations at Jagraon and Samrala. The Bar Association, Jagraon, was formed about the year 1922. Its strength in 1965 was 14. The Bar Association, Samrala, was formed in 1935. Its strength in 1965 was 40.

APPENDIX

(vide page 484)

Judicial Work done by Panchayats in Ludhiana District

	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
A-Revenue Cases							
1. Cases pending at the beginning of the year ..	151	196	257	304	278	273	352
2. Cases instituted ..	530	555	631	866	612	704	552
3. Cases received by transfer ..	17	26	18	22	16	25	13
4. Cases transferred from Panchayats and returned for presentation to Courts and Panchayats	27	21	35	44	17	24	10
5. Cases decided ..	520	499	591	870	616	626	589
(a) Cases dismissed ..	85	83	115	261	136	101	102
(b) Cases compounded ..	215	267	337	416	319	374	385
(c) Cases decreed ..	230	149	139	193	161	151	102
6. Cases pending at the end of the year ..	151	257	280	278	273	352	318
B. Criminal Cases							
1. Cases pending at the beginning of the year ..	114	117	128	188	145	136	181
2. Cases instituted ..	394	461	560	776	441	608	435
3. Cases received by transfer ..	28	21	13	28	20	37	30
4. Cases transferred from Panchayats and returned for presentation to Courts and Panchayats ..	19	32	36	70	32	55	34
5. Cases decided ..	400	439	481	677	438	545	439
(a) Cases dismissed ..	73	78	97	121	85	116	101
(b) Cases compounded ..	273	332	315	579	310	375	291
(c) Cases convicted ..	54	29	69	77	43	54	47
6. Cases pending at the end of the year ..	117	128	174	145	136	181	171

CHAPTER XIII

OTHER DEPARTMENTS

The set-up, staff, duties and functions of the important Government Departments located in the district, which do not find mention in other Chapters are briefly given hereunder.[1]

Irrigation Department

The following offices of the Irrigation Department are located in the district :—

(1) Superintending Engineer, Sirhind Canal Circle, Ludhiana ;

(2) Executive Engineer, Sidhwan Division, Ferozepore Canal Circle, Ludhiana and

(3) Executive Engineer, Ludhiana Drainage Division, Ludhiana.

Sirhind Canal Circle, Ludhiana.—It is under the Superintending Engineer, Sirhind Canal Circle, Ludhiana, who is under the administrative control of the Chief Engineer, Irrigation Works, Punjab, Chandigarh. He is assisted by 1 Circle Head Draftsman, 2 Draftsmen, 1 Superintendent, 1 Head Clerk, besides other ministerial and Class IV staff.

The Superintending Engineer, Sirhind Canal Circle, Ludhiana, controls the following divisions, each of which is under an Executive Engineer :—

(i) Ropar Division (Sirhind Canal Circle), Ropar ;

(ii) Ferozepore Division, (Sirhind Canal Circle), Ferozepore ;

(iii) Bhatinda Division (Sirhind Canal Circle), Bhatinda ; and

(iv) Bist Doab Division (Sirhind Canal Circle), Jullundur.

Sidhwan Division, Ludhiana.—It is under the Executive Engineer, Sidhwan Division, Ludhiana, who is under the administrative control of the Superintending Engineer, Ferozepore Canal Circle, Ferozepore. Ludhiana and Ferozepore districts fall within the jurisdiction of this Division.

The Executive Engineer, Sidhwan Division, Ludhiana, is assisted by 3 Sub-Divisional Officers, posted one each at Ludhiana, Moga and Zira, 1 Deputy Collector, 1 Head Draftsman, 1 Draftsman, 1 Tracer, 14 Sectional

1. The position given is as on 1st November, 1966 (in the re-organised State of Punjab).

Officers, 1 Head Clerk, 3 Accounts Clerks, 11 Clerks, 3 Sub-Divisional Clerks, 1 Head Revenue Clerk, 9 Assistant Revenue Clerks, 7 Revenue Clerks, 7 Zilladars and 90 Irrigation Booking Clerks, besides Class IV staff.

The Sub-Divisional Officer, Ludhiana, assists the Executive Engineer in the maintenance of the Sidhwan Branch system and collection of revenue therefrom from within the district.

Ludhiana Drainage Division, Ludhiana.—It is under the Executive Engineer, Ludhiana Drainage Division, Ludhiana, who is under the administrative control of the Superintending Engineer, Patiala Drainage Circle, Patiala. He is assisted by 4 Sub-Divisional Officers, posted one each at Ludhiana, Moga, Bhatinda and Malerkotla, and a Sub-Divisional Officer (Mechanical) posted at Sangrur, 30 Sectional Officers, 1 Head Draftsman, 5 Draftsmen, 1 Head Clerk and 1 Accountant, besides other ministerial and Class IV staff.

The main functions of this division are to attend to drainage and flood works in Ludhiana, Bhatinda, Sangrur and Ferozepore districts.

The Sub-Divisional Officer, Ludhiana Drainage Sub-Division, Ludhiana, attends to the drainage and flood works in Ludhiana district.

Public Works Department

The following offices of the Public Works Department are located in the district :—

(1) Executive Engineer, Ludhiana Provincial Division, (B&R), Ludhiana ; and

(2) Executive Engineer, Ludhiana Public Health Division, Ludhiana.

Ludhiana Provincial Division (B.&R.), Ludhiana.—This division was formed in 1955-56. Its function is to maintain public buildings and roads in the district, and to construct new roads and new buildings pertaining to the various departments. The Executive Engineer, Ludhiana Provincial Division (B&R), Ludhiana, who is incharge, is under the administrative control of the Superintending Engineer, P.W.D. (B&R), Jullundur Circle, Jullundur.

The Executive Engineer is assisted by 3 Sub-Divisional Engineers (No. I and No. II at Ludhiana, besides another at Khanna), 1 Head Draftsman, 2 Assistant Draftsmen, 2 Tracers, 13 Sectional Officers, 7 Road Inspectors, 3 Work Inspectors, 1 Head Clerk, 1 Divisional Accountant, and other ministerial and Class IV staff.

Ludhiana Public Health Division, Ludhiana.—Nangal Public Health Division, with headquarters at Ropar, was formed consequent upon the partition in 1947. In 1948, the headquarters of this Division were shifted to Ludhiana and it was re-named Ludhiana Public Health Division. This division was closed in April, 1950 and instead A.R.P. Fire Fighting Division Ludhiana, was formed. This was also closed in August, 1950, and again the Ludhiana Public Health Division, with headquarters at Ludhiana, was formed.

The Executive Engineer, in-charge of this Division, is assisted by 3 Sub-Divisional Officers, 12 Sectional Officers, 1 Head Draftsman, 2 Assistant Draftsmen, 2 Tracers, 2 Fitters, besides other miscellaneous and Class IV staff.

This division is entrusted with the engineering side of the public health and all the water-supply and sewerage schemes. Sanitary installations of the different towns in Ludhiana District are executed by it on behalf of the local bodies. The installation of water-supply and sewerage and their maintenance in all the Government buildings in the district is also undertaken by this division.

Punjab State Electricity Board

Ludhiana Circle of the erstwhile Punjab P.W.D., Electricity Branch, now Punjab State Electricity Board, was created in November, 1953 and Ludhiana Operation Division, Jullundur Operation Division and Thermal Operation Division, Karnal, were placed under its administrative control. Subsequently the following new divisions were also attached to this circle :—

(i) Khanna Tubewell Division ;

(ii) Carrier Communication Division, Dhulkote ;

(iii) Panipat Tubewell Division ; and

(iv) Hoshiarpur Operation Division.

In 1955, Jullundur and Hoshiarpur Operation Divisions were detached from the Ludhiana Circle, and instead Moga and Ferozepore Operation Divisions were attached to it. Later on, Thermal Operation Division, Karnal, Khanna Tubewell Division, and Carrier Communication Division, Dhulkot, were also detached from it, and Muktsar Operation Division was attached to it in 1959. Early in 1964, Ludhiana Operation Division was split up into two divisions, viz., Ludhiana Division No. I and Ludhiana Division No. II.

In March, 1966, the Ludhiana Circle, Punjab State Electricity Board, Ludhiana, had the following divisions under it :—

(i) Ludhiana Sub urban Division, Punjab State Electricity Board, Ludhiana (formerly Ludhiana Division No. I) ;

(ii) Ludhiana City Division, Punjab State Electricity Board, Ludhiana (formerly Ludhiana Division No. II) ;

(iii) Moga Division, Punjab State Electricity Board, Moga ;

(iv) Ferozepore Division, Punjab State Electricity Board, Ferozepore ; and

(v) Muktsar Division, Punjab State Electricity Board, Muktsar.

The Superintending Engineer, Ludhiana Circle, Punjab State Electricity Board, Ludhiana, is incharge of this circle. He is assisted by 1 Assistant Engineer, 1 Circle Superintendent, 1 Circle Head Draftsman, 1 Assistant Draftsman, 1 Tracer, besides ministerial and Class IV staff. Bhatinda Division, Punjab State Electricity Board, Bhatinda, formed in June 1966, was also attached to the Ludhiana Circle.

The main functions of the Punjab State Electricity Board are to provide electric connections for domestic, commercial, industrial and agricultural use, to ensure its steady supply and also to plan future demand and make arrangements to meet it.

Co-operative Department

In 1937, the office of the Assistant Registrar, Co-operative Societies, Ludhiana, was decentralized from the office of the Assistant Registrar, Co-operative Societies, Ambala. At that time, the field staff consisted of only 4 Inspectors. This strength was increased to 5 Inspectors and 25 Sub-Inspectors on December 31, 1954.

Ludhiana District was previously controlled by the Deputy Registrar, Co-operative Societies, Jullundur. With the selection of Ludhiana as one of the seven districts in India for the Intensive Agricultural Development Programme in 1960-61, a separate Deputy Registrar, Co-operative Societies, Package Programme, was posted at Ludhiana in October, 1960, and an additional Assistant Registrar, Co-operative Societies, was posted in 1962.

At present the Co-operative Department is represented at the district level by the Deputy Registrar, Co-operative Societies, Package Programme, Ludhiana. He is assisted by 2 Assistant Registrars, along with their respective staff, as under :

(i) Assistant Registrar, Co-operative Societies, Package Programme, Ludhiana. He is assisted by 20 Inspectors, 66 Sub-Inspectors, 1 Statistical Assistant, besides ministerial and Class IV staff.

(ii) Assistant Registrar, Co-operative Societies, Package Programme, Jagraon, with headquarters at Ludhiana. He was appointed in 1962. He is assisted by 18 Inspectors, 56 Sub-Inspectors, 1 Statistical Assistant besides ministerial and Class IV staff.

The main function of the Deputy Registrar is the propagation and supervision of the co-operative movement. He is to co-ordinate the Departments of Agriculture and Co-operative, to enable them to move hand in hand to accelreate the progress of agricultural production. He also looks after the supply line (agriculture in-puts like fertilizers, seeds, pesticides and insecticides, etc.) as also the easy and timely supply of credit to farmers at reasonable rates.

The duties of the Assistant Registrar are registration of Co-operative societies, fixation of maximum limit of co-operative societies, advance of loans, management and audit of the Central Co-operative Banks and unions of all co-operative socities in the district, appointment of liquidators for co-operative societies, making arrangements for the supply of fertilizers, seeds, agricultural implements, etc., through co-operative socieites, management of labour societies, etc. The main functions of the Assistant Registrar are supervision of the co-operative societies, popularisation of the co-operative movement in the area, and ensuring of supply of credit and production requisites to the farmers through the co-operative societies. The Assistant Registrars are to further ensure that the managements do not act arbitrarily and run the societies according to the bye-laws, rules and the Act. They are also to co-ordinate the activities of different departments.

FINANCE DEPARTMENT

The department is represented at the district level by the Treasury Officer who is incharge of the District Treasury.

The District Treasury was previously under the control of an Extra Assistant Commissioner (Revenue Department) who could not obviously devote full attention to this job, being incharge of magisterial work in addition to treasury duties. Under the scheme of Re-organisation of Treasuries, introduced on December 14, 1955, it came under the administrative control of the Finance Department and a whole-time Treasury Officer, belonging to the Punjab Finance and Accounts Service Cadre and well versed in the accounting procedure, was appointed for efficient control of the treasury accounts and funds.

The Treasury Officer is assisted by 2 Assistant Treasury Officers (one each for the Sub-Treasuries at Samrala and Jagraon), 1 Sadar Treasurer, 1 Assistant Treasurer and 2 Sub-Treasurers, besides other ministerial and miscellaneous staff.

The main function of the treasuries is to receive Government revenues and make payments on behalf of Government (both State and Central except post offices) to public as well as Government offices.

ANIMAL HUSBANDRY DEPARTMENT

The department is represented in the district by the District Animal Husbandry Officer, Ludhiana, who is under the Deputy Director, Animal Husbandry, Jullundur. He is assisted by 21 Veterinary Assistant Surgeons, 2 Animal Husbandry Assistants, 12 Livestock Assistants and 9 Veterinary Compounders, besides other miscellaneous staff.

The main activities of the Department are veterinary aid, improvement of livestock, control and eradication of contagious diseases amongst the livestock, poultry and piggery farming, etc. The department has started a separate unit for eradication of rinderpest, under the charge of the Rinderpest Eradication Officer, Punjab, with headquarters at Ludhiana. Animal Husbandry parties tour throughout the State and perform Got Virus Vaccination on mass scale against rinderpest.

Under the control of District Animal Husbandry Officer, Ludhiana, there is a Pig Breeding Unit at Ludhiana, started in 1965, and six sub-units in the six piggery development blocks at Samrala, Machhiwara, Khamanon Kalan, Khera, Sahnewal and Dakha. The unit at Ludhiana is under the charge of a wholetime Veterinary Assistant Surgeon while the sub-units are under the Veterinary Assistant Surgeons of the Veterinary Hospitals of their area. The Piggery Development Officer, Punjab, Chandigarh, renders administrative and technical advice.

There is also a Feed Processing Centre at Ludhiana, run by the Punjab Poultry Corporation, Chandigarh. It was established in 1965. It's under the charge of the Assistant Supervisor. The centre is under the administrative control of the Punjab Poultry Corporation. Its main functions are to procure, mix and distribute poultry feed to Government poultry farms, co-operative poultry societies, poultry associations, poultry farms, etc.

Attached to the Feed Processing Centre is the Government Poultry Service Centre at Ludhiana under the charge of a Poultry Supervisor. It was started in 1963-64 to develop poultry farming in the district by catering to the needs of poultry breeders and guidance on problems of poultry farming like veterinary aid, prohylactic vaccination, disease control, marketing,etc., and also to arrange for the collection of eggs from poultry farmers for onward supply to the Punjab Poultry Corporation.

PUBLIC RELATIONS DEPARTMENT

The department is represented at the district level by the District Public Relations Officer. He is assisted by 3 Field Publicity Assistants (men) and 1 Lady Field Publicity Assistant for field and press publicity in urban and rural areas, 3 Radio Mechanics, 1 Technical Assistant for maintenance of community listening radio-sets besides other staff. He is also provided with a mobile cinema unit, a drama party, a Kavishar Jatha and a children's film unit.

The functions of the District Public Relations Officer are to serve as a liaison between the State Government and the Public and to disseminate and publicise Government policies and programmes. His work requires expert handling of various media of publicity. Briefly, it comprises multifarious items relating to coverage of Government functions and arrangement for the publication of their reports in the press ; organisation of Public meetings and rural conferences ; holding of Kavi Durbars, variety programmes, dramas, cinema shows and exhibitions ; covering of public reaction to Government policies to the quarters concerned and communication of people's grievances to the district and State authorities ; distribution of Government publicity literature ; and converage of visits of Ministers and other V.I.Ps., etc. He is also incharge of tourism and cultural affairs in the district.

The Department maintains an Information Centre at the district headquarters.

FOOD AND SUPPLIES DEPARTMENT

The Department is represented at the district level by the District Food and Supplies Controller, Ludhiana. This office came into existence in an interesting manner. In 1942, a few officials of the Co-operative Department started purchasing wheat on behalf of Government for distribution among the consumers. In 1944, another wing, known as the Civil Supplies Office, dealing with the distribution of essential supplies like cloth, sugar and kerosene oil, was also created. In 1948, the District Food and Supplies Controller was made incharge of the foodgrains section in the district and the Civil Supplies Officer was the head of the Civil Supplies Section.

With the introduction of monopoly procurement of wheat and rationing in Ludhiana town in 1946, another office, known as the Rationing Controller's Office, was established in district. In 1948, due to the de-control of cloth and de-rationing of cereals and sugar, the office of the Rationing Controller was abolished. It resulted in heavy retrenchment of staff.

Towards the end of 1948, rationing and cloth control were re-introduced and put under the charge of the District Organiser, Civil Supplies and Rationing, The District Food and Supplies Controller, however, remained independent incharge of the food office. The monopoly procurement and rationing was abandoned in 1953 and the food and supplies offices were amalgamated and put under the charge of the District Food and Supplies Controller. The combined office is functioning since then.

The District Food and Supplies Controller, Ludhiana, is assisted by one District Food and Supplies Officer, three Assistant Food and Supplies Officers, forty three Inspectors and Sub-Inspectors, besides other ministrerial and miscellaneous staff. An Inspector, Food and Supplies, is posted at each of the nine important *mandis* in the district, viz., Ludhiana, Sahnewal, Khanna, Jagraon, Mullanpur, Raikot, Doraha, Samrala and Machhiwara, for the purchase, storage and distribution of wheat, rice, etc.

The main functions of the department at district level are procurement of wheat and rice on behalf of the State and Central Governments, storage and despatch of the wheat within the State and outside it, according to the allotments; distribution of sugar, foodgrains and kerosene oil through fair price shops ; ensuring proper distribution/sale of cement, soft coke and bricks at fixed rates ; fixing of the rates of controlled commodities and ensuring their fair distribution and enforcement of the control orders; and grant of licences for foodgrains, cotton, yarn, rice milling, sugar/khandsari, fire-wood, brick kilns and kerosene oil and the enforcement of conditions thereof.

The department is running 94 fair price shops at Ludhiana, 13 at Khanna, 2 at Samrala, 2 at Raikot, 16 at Jagraon and 2 at Doraha. Government owned godowns are maintained at Jagraon and Khanna. A foodgrains laboratory is also maintained at Ludhiana to check the quality of foodgrains and rice.

Planning Department

The Economic and Statistical Organisation of the Planning Department, Punjab, is represented in the district by the District Statistical Officer, Ludhiana, who is assisted by one Technical Assistant, besides other ministerial and class IV staff. This office was established in the beginning of March, 1960.

Its main functions are to co-ordinate the statistical activities of the different departments at the district level, ensure that the data collected by the different district agencies are furnished in time and conform to certain minimum standards, undertake on the spot investigations on the collection of the data, collect such economic and statistical data as are either not available

at present or are extremely meagre, inadequate or not reliable for which there is no suitable agency, meet such other demand for statistics as may arise from time to time for administrative and policy needs, render technical guidance to the district agencies in collection and processing of data and maintain liaison with other statistical agencies which operate at the distric level.

National Savings Organisation

The National Savings Scheme was introduced during the World War II when it was known as the National Savings Central Bureau. It was re-organised in 1948 when a Director was appointed in each State, assisted by an Assistant Regional Director, and one or two District Organisers, National Savings, in each district.

The Ludhiana Branch of the National Savings Organisation was established in 1948. There are three District Organisers, National Savings, one each at the headquarters of the three sub-divisions in the district i.e., Ludhiana, Jagraon and Samrala. Their main functions are to promote the habit of thrift among the public to persuade the public to invest their savings with Government in one of the Small Savings Securities; to appoint, guide, train and motivate the agents; to form savings groups and watch their efficient functioning ; and to work for the promotion of the savings movement in close collaboration with other Government Organisations like the post offices, community projects, co-operatives, schools and colleges, municipalities and State Government, and to utilize the good offices of non-official organisations for the purpose.

The annual target of collections is fixed by a committee known as the State Advisory Board for Small Savings, Punjab. The target, fixed by the committee, is distributed among the Commissioners of the respective Divisions, leaving it to them to sub-divide their divisional targets among their respective districts. Each district has a Savings Committee which reviews the progress of the Small Savings Scheme every month and devises ways and means for its intensification. The district targets are sub-divided among various trades and professions, educational institutions, industries, bazars, mandies,offices, etc., and the implementation of these is entrusted to the members of the Savings Committiee.

Publicity is carried on by means of cinema slides, films, folders, posters, exhibitions, public meetings, door-to-door and shop-to-shop canvassing, etc., in order to educate the people regarding the advantages of the scheme to them and to the nation.

The gross and net collections for the years 1961-62 to 1965-66 in Ludhiana district are given in chapter 'Banking, Trade and Commerce' on page 311.

Language Department

The Department is represented at the district level by the District Language Officer, Ludhiana, who is assisted by one Inspector, besides ministerial and class IV staff.

Before the introduction of the regional languages (Punjabi in Punjab region and Hindi in Hindi Region) on October 2, 1962, at and below the district level, for official use in the then Punjab State, Language teachers were appointed to teach Punjabi/Hindi to the employees of the State Government. In order to ensure easy and smooth switch-over to the Punjabi in Ludhiana District by the said date, an Introduction Cell was created at the district headquarters in September, 1962. To start with the staff consisted of an Incharge District Language Introduction and an Inspector for Punjabi Type and Stenography. The District Language Officer was provided in 1963 to supervise the work of introduction of the regional language in the district administration. He is expected to visit the different State Government offices located in the district and assist in the introduction of Punjabi. Typewriting and shorthand classes are held free of charge for the benefit of the Government employees.

सत्यमेव जयते

CHAPTER XIV

LOCAL SELF-GOVERNMENT

(a) History of Local Self-Government in the District.—Local Self-Government in the Punjab, as elsewhere in India, is of two kinds : the Local government of the villages and that of the towns. The former is an old indigenous institution dating from the remotest antiquity while the latter is an exotic growth of western importation. The development of local government in large towns is described here while rural local government falls under the head Panchayati Raj.

Municipal Government in India has its roots in pre-historic times. Some form of municipal authority appears to have been well-established even during the period of the Harappan civilization. Positive evidence of a highly developed urban civilization is provided by the archaeological excavations at Harappa (Montgomery District) and Mohenjodaro (Larkana, Sind) in West Pakistan. The streets were well planned with obvious town-planning restrictions on sporadic buildings. Most impressive are the systems of drains. They testify to the vigilance of some regular and effective municipal government.

The village was the unit of State in ancient India. There was, however, no clear dividing line between a village (*grama*) and a town (*nagara*). *Gramani* was the head of the village as well as of the town. Gradually villages developed into large towns and a city culture was evolved and reached its high water mark during the Mauryan and Gupta periods of Indian history. Cities had their councils and also most probably had municipal administrations on the pattern of the metropolitan city of Pataliputra as described by Megasthenese, the Greek ambassador at the court of the Mauryan Emperor Chandragupta.

The Sultanate of Delhi and the Mughal rule were an undiluted despotism, with a highly centralized bureaucracy, and an urban culture. The cities were the foci of political power. Their civil administration was vested in the *Kotwal*, whose multifarious functions, as described by Abul Fazl in the *Ain-i-Akbari*,[1] included a number of such duties as in modern times are regarded as municipal functions. The office of the *kotwal* was developed as the key stone of municipal organisation. Appointed under the *sanad* of the Emperor, the *kotwal* was a person of high status. Law and order was his first responsibility, and he maintained a body of horse, city guards and an army of spies. Almost every aspect of city life came under his charge ; he appointed a headman

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1. Abul Fazil, *Ani-i-Akbari*, translated by Col. H.S. Jarrett, Vol. II, pp. 41-43, (Calcutta, 1891).

or '*Mir muhalla*' for every ward, he kept a register of houses and roads, and directed the location of cemeteries, slaughter-houses, and sweeper colonies. He controlled the markets, checked weights and measures, supervised local prices. He levied the local taxes, market dues, tolls and transit duties[2].

During the medieval and Mughal periods, there were no regular municipal institutions enjoying powers of self-government. Municipal self-Government traditions of ancient India simply withered away under the military despotism of the Sultanate of Delhi and the Mughal Empire.

Local Self-Government as a representative Organisation responsible to a body of electors with necessary powers of administration and taxation and functioning as a school for training in responsiblity is a British legacy in India. While the existence of elective organisations in ancient India or the formation of panchayats in the villages in the form of Local Self-Government since very early times cannot be denied, it is indisputable that the foundations of modern system of Municipal Government were laid during the period of British rule in the country. Local Self-Government in the sense it is understood today was thus gradually evolved as a result of a series of legislative enactments passed from time to time under the British regime.

The Government of India Act XXVI of 1850 permitted the formation of local committees to make better provisions for Public Health and Sanitation and to raise taxes for the said purpose. The legislative provision, however, was conditioned by the fact that the action should be taken on the application of the inhabitants. The Royal Army Sanitary Commission invited pointed attention to the unhealthy conditions of the towns in its report in 1863. Prompt action was taken by the Punjab Government in pursuance of the recommendations and under the Punjab Act XV of 1867, the voluntary provision for the constitution of Municipaities was dropped and the provincial Government assumed necessary powers to set up Committees to look after water-supply, lighting and sanitation of towns. The said Act permitted the election of a number of members of Municipal Committees with the permission of the Provincial Government. The measures proved useful in improving the sanitary conditions in the towns. The Ludhiana Municipality was formed in 1867 under the said Act and action in this regard was taken at the instance of the military authorities to meet the long felt need.

Lord Mayo's resolution on provincial finances, which encouraged the general application of the principle of election to the local bodies, was another step in the development of Local Self-Government in India. A Punjab Act

2. P. Saran, *The Provincial Government of the Mughuls*, pp. 231-35. (Allahabad, 1941)

of 1873 passed in pursuance of the above resolution made membership of of Municipal bodies permissive by elections.

During the initial stage the system of Local Self-Government could by no means be said to be fully democratic. The predominance of the official control gave little chance for local inititative. In fact during this phase the accent was more on the "local" rather than the "Self Government" aspect of Municipal administration.

The review of the Local Government done by the Royal Commission of decentralisation in 1907-1909 did not embody any progressive Municipal policy. The introduction of communal electorates under the Government of India Act 1909 proved to be a great impediment to the healthy development of Municipal Government in the Punjab. The Punjab Municipal Act, 1911, did not introduce any substantial changes in the Municipal administration. In 1912, at the direction of Government of India, the appointment of a Health Officer was made compulsory in large towns. During the period 1909—1919 there was no significant change in the Municipal administration. The Deputy Commissioner continued to the be the king pin. The Municipal Committees continued to suffer from chronic financial stringency, rigid central control and mal-administration. The outbreak of World War I (1914—18) had adverse effect on the working of the Municipal bodies. The goal of "political and popular education" remained as elusive as ever. By and large Local Self-Government in the district continued to be one of the functions of the district officer.

Under the system of dyarchy, 1919—1937, official control was gradually relaxed and local bodies were made completely elective. It was desired to establish Local Self-Government, whereby the people would be free to manage their own affairs. The new policy accepted the principle that political education of the public must take precedence over departmental efficiency. The Government of India Act, 1919, prescribed a new schedule of taxes, which could be levied by or for the local bodies. This measure not only enlarged the sphere of taxation but also enabled the local bodies to feel relatively independent.

The Punjab Small Towns Act, 1922, simplified the machinery for Municipal administration of Small Towns with population of less than 10,000. Under the new scheme the Town Committees consisiting of not less than 5 member 3/4 of whom were to be elected, were proposed for all such towns. The Punjab Municipal (Executive Officer) Act, 1913, invested the Provincial Government with powers to appoint Executive Officer in the Municipalities.

With a dawn of independence in 1947 a new vista had been opened in the growth of Municipal Government. Local Self-Government has assumed new significance, a new status and has a new role to play as the base of demo-

cratic set-up in the country. It is, however, to be regretted that the urban local bodies have so far failed to meet the aspirations of the people. The new national set up in the country has not brought about any great improvement in the field of Local Self-Government. The cursory comparison of Municipal administration in the pre and post-independence periods leads to the unfortunate conclusion that a dynamic system of Municipal administration has yet to be evolved. The existing Municipalities at Ludhiana, Jagraon, Khanna, Raikot and Machhiwara were raised to Class II[3] standard in 1886 in accordance with the Punjab Government notification No. 687, dated 28th September, 1886. Their boundaries were defined in 1886 and building bye-laws were sanctioned in 1888. Penal laws and Octroi limits were fixed in 1890[4].

Bahlolpur Municipality was abolished in 1886. Similarly the Municipal Committee of Machhiwara was abolished in 1911. Samrala got a small Town Committee in 1933 and was made a Class III Municipality in 1956. Ludhiana was elevated to a Class I Municipality in 1949. Doraha, which had a Small Town Committee, became a Class III Municipality in 1956.

Functions and Duties of Municipal Committees.—Under the Punjab Municipal Act 1911, the municipal committees are required to make reasonable provision within the limits of the municipality for lighting of public streets, places or buildings; cleaning public streets, places and sewers and all spaces not being private property, which are open to the enjoyment of the public; safe and sufficient water-supply for all domestic purposes; extinction and

[3]. Municipalities are set up in cities and larger towns and are governed by the State enactments. In the Punjab, municipalities are classified into three classes, on the basis of population, income and other relevant factors, as under :

(i) Class I Municipalities, with population exceeding 50,000 ;

(ii) Class II Municipalities with population exceeding 20,000 but not exceeding 50,000 ;

and (iii) Class III Municipalities with population exceeding 10,000 but not exceeding 20,000

[4]. The Municipal boundaries of Ludhiana, Jagraon, Raikot, Khanna and Machhiwara were fixed by Punjab Government Notification No. 683, dated the 28th September, 1886, No. 713, dated the 24th September, 1888 and No. 96, dated the 24th February, 1902.

Their rules of business are given in the Punjab Government Gazette dated the 10th March, 1887, p. 284 of Part III ; also Notifications No. 43, dated the 3rd August, 1898, No. 21, dated the 3rd August, 1899 (Ml. Manual, pp. 357-58).

Their octroi limits were defined by Punjab Government Notification No. 479, dated the 1st July, 1890, and the schedule, prescribed by Notification No. 822, dated the 5th July, 1876, was revised in 1887, and 1899 (Notifications No. 110, dated the 11th March, 1887, and No. 330, dated the 5th July, 1899). In the case of Jagraon Municipality, the schedule of Octroi, prescribed by Notification No. 822, dated the 5th July, 1876, was revised in 1897 (Notification No. 581, dated the 4th December, 1897 as corrected by Notifications No. 301, dated the 1st July, 1899, and No. 253, dated the 16th June, 1900) and in the case of Machhiwara Municipality, the schedule of Octroi, prescribed by Notification No. 1106-S., dated the 29th April, 1887.

Building bye-laws were sanctioned *vide* Punjab Government Gazette, Part III, p. 70, dated the 26th January, 1888, and penal bye-laws by Notification No. 370, dated the 3rd June, 1890. The penal bye-laws of Jagraon municipality were sanctioned by Notification No. 371, dated the 3rd June, 1890. In the case of penal bye-laws the model rules were adopted (Ml. Manual pp. 450-51).

prevention of fire, regulating or abating offensive or dangerous trades or practices; control of public and private buildings and thoroughfares; establishing and managing of pounds; requiring dangerous or insanitary buildings or places to be secured; construction, maintenance and alteration in public streets, culverts, markets, veterinary dispensaries, slaughter houses, latrines, urinals, baths and washing places, drains sewers, and providing public facilities for drinking water; control of infectious diseases; scavenging and house-scavenging; acquiring, maintaining and regulating of burial and burning places for the disposal of the dead, unclaimed dead bodies and dead bodies of paupers; disposal of mad and stray dogs and other animals; disposal of dead animals; public vaccination; registration of births and deaths; and naming streets and numbering houses.

Prior to 1957, elementary education was one of the obligatory functions of local bodies. But this system was not working satisfactorily. Charges of apathy, incompetency, ill-treatment of teachers, religious and political bias, nepotism and other forms of graft were levelled against local bodies. By and large the municipal bodies had not developed adequate sense of civic responsibility in the field of education[5]. In view of these factors, all municipal schools——primary, middle and high——in the State were provincialized in October, 1957. The municipalities have since been required to pay fixed contributions to Government in lieu of this obligation.

(b) **Municipalities**

Ludhiana Municipality.—Ludhiana was constituted a municipality in 1867. It was raised to a Class II municipality in 1886[6]. In view of the growing importance of the town, it was raised to a Class I municipality with effect from December 15, 1949[7]. The municipal limits were extended in 1952 and again in 1962, increasing the total area from 7 square miles in 1952 to about 17 square miles in 1962. The population of the town rose from 1,11,639 in 1941 to 1,53,795 in 1951 and 2,44,032 in 1961.

After the last extension of the municipal limits on January 16, 1962, the delimitation of the wards of the municipality was notified,—*vide* Punjab Government Notification No. DE63/5A/3595, dated the 23rd May, 1963.

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[5].As early as 1937, the Educational Commissioner, Government of India, observed : "It is obvious that the administration by local bodies of primary education has entirely failed. Local bodies complain of inadequacy of funds, but the waste involved is such that three fourths of the expenditure on primary education is rendered entirely unproductive."

[6].*Vide* Punjab Government Notification No. 687, dated the 28th September, 1886.

[7].*Vide* Punjab Government Notification No. 10620-30-49/II-305, dated the December, 1949.

The city was divided into 38 constituencies out of which 3 are double member constituencies. Three seats are reserved for Scheduled Castes. All the 41 members are elected members. The last municipal election was held in 1964[8].

The Punjab Municipal (Executive Officer) Act, 1931, was extended to the Ludhiana Municipality on November 3, 1965[9], and a P. C. S. officer was appointed as an Executive Officer from November 20th, 1965.

Local Government has been defined as the provision of services to a local community through a representative assembly. Municipal services affect the life of the citizens from womb to death. The key civic services are as under :

Communications.—The provision of communications is one of the main function assigned to municipalities. It includes construction and maintenance of roads, bridges, culverts, etc. Only district roads falling within the limits of municipalities are the concern of the municipal committees concerned.

All the public streets and roads within the Ludhiana municipal limits are brick-paved tarred or slabbed. Surface drains have been provided in all the localities where streets have been declared public streets and are maintained by the municipality.

The municipal roads in the town have been considerably improved during the last few years. The Mall, The Daya Nand Hospital Road and Jail Road have been converted in to two-way traffic roads. This has not only added to the beauty of the localities but has greatly helped in reducing traffic jams. Another important artery of industrial communications, viz., the Gill Road, bearing the heaviest traffic, is also being converted into a two-way traffic road. Other roads in the city have, as for as possible, been re-conditioned so as to provide foot-paths for the pedestrians.

Medical and Public Health.—Medical and public health are among the obligatory functions of municipalities. The municipality is responsible for health administration in their respective areas including the control of epidemic diseases. The work in this field is divided into several activities, e. g., conservancy, sanitation, medical relief, anti-epidemic work, prophylactic public health (such as vaccination and anti-malaria work) and vital statistics.

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[8].The election of the Ludhiana municipality, held in 1964, was noitfied,—*vide* Punjab Government Notification No. 5580 ICIII-64/23834, dated the 1st July, 1964. The election of the President of the municipality was notified,—*vide* Punjab Government Notification No. 12583-ICI-64/45675, dated the 10th December, 1964.

[9].*Vide* Punjab Government Notification No. 11661-201-65/45661, dated the 3rd November, 1965.

(i) **Conservancy.**—The municipality has dry-latrine system and has employed 467 whole-time and 164 part-time sweepers for sweeping the streets and removal of refuse which is taken through trucks and trailers, animal—driven carts and donkeys to the dumping grounds situated on all the four sides of the city. The refuse is dumped and composed into manure. The house scavanging is done by private sweepers.

(ii) **Sanitation.**—The construction of underground sewerage is in progress since 1961. The sewers in the Civil Lines, Miller Ganj and Bharat Nagar are already complete and functioning.

(iii) **Public Health.**—The municipality has a whole-time Superintendent Vaccination, and 8 Vaccinators. During the year 1965-66, 10,716 persons were vaccinated and 8,930 persons re-vaccinated. In the same year, 10,607 births and 2,668 deaths were recorded.

Vital statistics are the eyes and ears of the health organisation. But generally adequate attention is not paid to this basic work. Consequently vital statistics of the municipality are generally deficient both in quality and quantity.

Protected Water Supply.—Piped water-supply for Ludhiana was originally provided as far back as 1906-07. In the beginning, water was supplied from 24 shallow-wells by means of steam-pumping plants. This arrangement originally made to cater for a small population, became inadequate for the growing needs of the fast developing city. After the partition of 1947 in particular, the city developed extensively and the population also increased considerably. The municipality, therefore, undertook the National Water-Supply Scheme during the Third Five-Year Plan. The water is now supplied through electrically worked deep tubewells. The daily discharge of water is 42·45 lakh gallons. Rs. 2,68,525 were spent for laying mains and sub-mains during 1963-64. The R. C. C. over-head reservoir of 1 lakh gallon capacity at a cost of Rs. 1,78,838 was completed in 1964-65 to feed three storeyed buildings. A newly constructed *dhobi ghat* has also been granted water connection. The municipality has also taken up the work of installation of tubewells and laying of mains and sub-mains on Samrala Road, Jail Road, Jawahar Nagar, Industrial areas, Tagore Nagar, Sham Singh Road and Sukhram Nagar.

Fire Fighting Service.—The municipality maintains an up-to-date fire brigade with standard equipment. The staff works in three shifts of eight hours each. A sub-station has been established in the Miller Ganj.

Miscellaneous activities.—As Ludhiana lacks gardens, the municipality has laid a beautiful garden near the Head Water Works, named as 'Nehru Garden'. Shri Lal Bahadur Shastri Hall, with a capacity to accommodate 3,000 persons is also being built at a cost of Rs. 3 lakhs.

A model Fruit and Vegetable Market has been constructed at a cost of Rs. 10 lakhs. A fodder market has also been constructed by its side. The slaughter house is also being shifted to a newly constructed modern style building outside the city.

The main sources of income of the municipality are octroi, house tax *tahbazari* fee, water-rate, show tax and rent of shops, besides some other miscellaneous sources.

The income and expenditure of the municipality, during the period 1941-42 to 1965-66, were as under :

Year		Income	Expenditure
		Rs.	Rs.
1941-42	..	3,18,729	3,47,061
1951-52	..	16,10,328	15,12,225
1956-57	..	27,05,624	24,69,969
1961-62	..	48,85,488	43,61,903
1962-63	..	47,18,961	48,61,023
1963-64	..	52,07,746	52,23,396
1964-65	..	66,23,934	58,56,666
1965-66	..	61,72,479	68,87,805

(*Source* : Secretary, Municipal Committee, Ludhiana)

Doraha Municipality :—Doraha falls in Payal sub-tahsil which was transferred from Patiala district to Ludhiana district on November, 1963.

Doraha was constituted as small town committee in 1945. The Punjab Municipal Act, 1911, was made applicable to the municipality in 1956 when the erstwhile Pepsu was merged with the erstwhile Punjab. According to the Census of 1961, the population of the town is 4601.

Doraha was formed a Class III municipality in 1956. The total strength of the members of the municipal committee as fixed under section 11 of the Punjab Municipal Act, 1911, is 8. The municipal area has been divided into 8 wards. The election of the muncipal committee was last held in 1961.

The main sources of income of the municipality are taxes and fees such as octroi, local rate, taxes, fees, property of local bodies. etc.

The income and expenditure of the municipality, during the period 1954-55, to 1965-66 were as under :

Year		Income	Expenditure
		Rs.	Rs.
1954-55	..	69,127	1,900,58
1956-57	..	77,860	76,697
1961-62	..	76,097	70,299
1962-63	..	1,16,360	1,05,723
1963-64	..	94,421	80,031
1964-65	..	91,311	79,758
1965-66	..	96,825	1,18,327

(*Source* : Secretary, Municipal Committee, Doraha).

Jagraon Municipality : Jagraon was constituted into a Class II municipality in 1886. It was reduced to a Notified Area Committee[10] in accordance with the Punjab Municipal Act, 1911, but was restored to the status of a Class II municipality in 1923.

There are 15 members of the Municipality.

The water works system functions in a part of the town.Out of a total cost of Rs. 7,00,000 incurred by the State Public Health Department, Rs. 4,00,000 were contributed by the municipality for the construction of the water-works which started giving connections in 1966.

Almost all the streets in the town are paved and provided with pucca drains on both sides. The street lighting facility has been provided through electric bulbs, gases and kerosene oil lanterns. The municipal park named Lajpat Rai Park was constructed in 1961 at a cost of Rs. 3,000.

For conservancy, 2 sanitary patrols and 74 whole-time sweepers have been appointed for sweeping the streets and bazars. The refuse and night soil are deposited in compost pits.

A hospital is run by the municipality. In addition a part-time Municipal Medical Officer of Health, Inspector of Vaccination and Sanitation and a Vaccinator have been employed by the municipality.

The main sources of income of the Jagraon municipality are taxes and fees, such as octroi, house tax, cycle tax, cinema show tax, *tahbazari* fee, slaughter house fee, etc.

[10]. Town Area Committees and Notified Area Committees are at the lowest rung of the ladder. They are miniature, embryonic local authorities. Town area committees are established for small towns in rural areas excluding agricultural villages. Notified areas are towns which are not considered fit for full municipal institutions. Some portions of the State Municipal Act are applied to them and their affairs are administered by small nominated committees. In each case, the maximum population level is 10,000. The powers and functions of town area committees and notified area committees are limited and the degree of State control over them is more than in the case of municipalities.

The income and expenditure of the municipality, during the period 1940-41 to 1965-66, were as under :

Year		Income	Expenditure
		Rs.	Rs.
1940-41	..	70,644	67,624
1951-52	..	2,16,676	1,93,841
1956-57	..	3,73,058	3,35,311
1961-62	..	5,98,134	4,01,864
1962-63	..	4,73,136	6,74,591
1963-64	..	4,74,175	4,65,096
1964-65	..	4,86,386	4,54,724
1965-66	..	5,45,654	4,77,997

(*Source* : Secretary, Municipal Committee, Jagraon)

Raikot Municipality : Raikot was constituted a Class II municipality in 1886[11]. It was reduced to a notified area committee in accordance with the Punjab Municipal Act, 1911, and then raised to a small town committee in accordance with the Punjab Small Towns Act, 1922. On the repeal of the Small Town Act in 1954, it was re-constituted a Class II municipality in 1961, under the Punjab Municipal Act, 1911.

The Municipal area is divided into 9 wards, out of which 4 form double member constituencies and 5 single member constituencies[12].

Almost all the streets of the town are paved. The old central drains have been replaced by side drains. Street lighting is provided. A park for women and children has been constructed.

The Assistant Surgeon, incharge Civil Dispensary, is the Honorary Medical Officer of Health. He is assisted by a Sanitary Inspector who also attends to the vaccination work.

The main sources of income of the municipality are house tax, local rate, octroi and property of local body, etc.

11. *Vide* Punjab Government Notification No. 687, dated the 28th September, 1886.

12. *Vide* Punjab Government Notification No. 2334/L.F.A., dated the 19th April, 1961.

The income and expenditure of the municipality, during the period 1948-49 to 1965-66, were as under

Year		Income	Expenditure
		Rs.	Rs.
1948-49	..	44,223	39,465
1951-52	..	58,900	56,936
1956-57	..	1,05,342	94,309
1961-62	..	1,25,310	1,17,846
1962-63	..	1,12,622	1,12,782
1963-64	..	1,30,597	1,17,473
1964-65	..	1.05.240	1,51.641
1965-66	..	1,39,671	1,43,394

(*Source* : Secretary, Municipal Committee, Raikot)

Samrala Municipality : Samrala was constituted a small town committee in 1933, under the Punjab Small Towns Act, 1922. On the repeal of the Act in 1954, this local body was raised to a Class III municipality . The Punjab Municipal Act, 1911, was made applicable within the jurisdiction of this committee from April 1, 1955.

The municipal area is divided into 9 wards, out of which 2 from double member constituencies. There are in all 11 members of the municipal committee.

Electric lighting was provided in the town in 1961. A regular drainage system has been laid out. The sullage water is pumped out from sullage tanks by means of electric pumping-sets. A scheme for piped water-supply has been completed at an estimated cost of Rs. 2,38,953.

Road links have been consolidated, viz., Samrala-Khanna Road within town limits, Ludhiana-Chandigarh Road within town limits, and a new link or circular road.

Suitable arrangements have been made for conservancy and sanitation in the town. A Sanitary Inspector and a Jamadar supervise the conservancy staff. Another Sanitary Inspector looks after the public health and the vaccination and re-vaccination in the town[13].

[13] A part time Municipal Medical Officer of Health was appointed from June 15, 1967.

The main sources of income of the municipality are the usual fees, house tax, property of local bodies, octroi, etc.

The income and expenditure of the municipality, during the period 1961-62 to 1965-66, were as under :

Year		Income	Expenditure
		Rs.	Rs.
1961-62	..	1,37,959	1,32,704
1962-63	..	1,46,201	1,43,480
1963-64	..	1,80,484	1,74,931
1964-65	..	3,40,316	3,40,408
1965-66	..	1,98,483	1,89,309

(*Source* : President, Municipal Committee, Samrala.)

Khanna Municipality : Headquarters of a petty Sikh chiefship, Khanna along with its large jagir, lapsed to the British in A. D. 1850 on the death of the last representative of the family named Mai Daian Kaur. Khanna was constituted a Class II municipality in 1886[14]. It was reduced to a notified area committee in accordance with the Punjab Municipal Act, 1911, It was again raised to the status of a small town committe in 1924 in accordance with the Punjab Small Towns Act, 1922, and restored to a Class II municipality in 1933,—*vide* Punjab Government Notification No. 24113, dated the 22nd September, 1933. The boundaries of the municipality were specified in 1933,—*vide* the same notification, and further extended in 1952,—*vide* Punjab Government Notification No. 3822/C/52/11/3410, dated the 11th June, 1952.

The municipal committee was superseded in 1952[15] but was re-constituted in 1955.[16] The last election was held on May, 31, 1964[17].

The main sources of income of the municipality are local rate, taxes, fees, property of local bodies, medical and health, etc.

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[14] *Vide* Punjab Government Notification No. 687, dated the 28th September, 1886.

[15] *Vide* Punjab Government Notification No. 1697-C-52/11-1797, dated the 31st March, 1952.

[16] *Vide* Punjab Go vernment Notification No. 2650-A-I-LFA, dated the 17th June. 1955.

[17] The names of the 15 members (13 General plus 2 Reserve) of the Khanna Municipal Committee were notified,—*vide* Punjab Government Notification No. 2193/LFA, dated the 11th June, 1964.

The income and expenditure of the municipality, during the period from 1910-11 to 1965-66, were as under :

Year		Income	Expenditure
		Rs.	Rs.
1910-11	..	6,829	6,826
1920-21	..	5,028	4,961
1930-31	..	13,590	10,301
1940-41	..	30,097	20,217
1950-51	..	1,13,579	1,23,226
1951-52	..	1,34,798	1,33,694
1956-57	..	3,67,896	3,55,755
1961-62	..	6,54,161	6,42,138
1962-63	..	10,17,216	10,33,828
1963-64	..	5,39,870	4,98,486
1964-65	..	6,06,725	6,95,453
1965-66	..	10,05,113	9,11,664

(*Source* : Secretary, Municipal Committee, Khanna)

(c) **Town Planning and Public Health** : Town Planning, which promotes healthy living conditions for the inhabitants, is still in its infancy in the country. The Department of Town and Country Planning, Punjab, helps and advises the municipal committees and improvement trusts, wherever these exist, in the preparation of planning schemes which are regulated under the provisions of the Punjab Municipal Act, 1911, and the Punjab Town Improvement Act, 1922 respectively.

The town planning work at Ludhiana was started in 1944. At present (1966) it is looked after by the Assistant Town Planner, Ludhiana, who is under the control of Divisional Town Planner, Ludhiana Division, Ludhiana.

Ludhiana has developed tremendously since 1947. It has expanded in all directions and quite a few residential colonies and industrial estates and areas have come up.

Besides Ludhiana, town planning schemes are being worked out in four other municipal towns, in the district, viz., Jagraon, Raikot, Samrala and Khanna.

The Asisstant Town Planner, Ludhiana, has to function in a restricted manner. Town Planning is a centralized and specialised agency and can only advise the municipalities, improvement trusts and Government on all the matters relating to town planning. It is essentially the function of municipalities or improvement trusts to implement the town planning schemes under Punjab Municipal Act, 1911, and the Punjab Town Improvement Act, 1922.

The various types of town planning schemes in the towns in the district, sponsored under various enactments, are as under :

(1) Town Planning Schemes for unbuilt areas and building schemes for built up areas under section 192 of the Punjab Municipal Act, 1911,

(2) Development and other slum clearance schemes framed by the Town Improvement Trusts,

(3) Government sponsored schemes, viz.,—

(i) Industrial Estates

(ii) Industrial Areas

(iii) Mandi Development Schemes :

(iv) Rahabilitation Schemes, viz., Model Townships, 8 Marla Housing Schemes and 4 Marla Housing Schemes, and

(4) Housing Schemes for various Co-operative Housing Societies.

Ludhiana Improvement Trust, Ludhiana : Improvement trusts are *ad hoc* bodies constituted for the general purpose of city development including opening up of congested areas, clearance of slums, provision of sanitary dwellings and orderly expansion of the towns. Thus, an improvement trust is an important aspect of Municipal functions—an aspect which actually affects the health, well-being and prosperity of the people living in the city. It is a small body consisting of 3 trustees elected by the local municipal committees and 3 trustees and a chairman appointed by the State Government—all for a term of 3 years though eligible for re-election or reappointment.

Under the Punjab Town Improvement Act, 1922, improvement trusts have been set up for selected towns. Two such trusts were created in Ludhiana District for Ludhiana and Jagraon.[18] Ordinarily, the limits of an improvement trust are co-terminous with the municipal limits of a town, but can be extended

[18] The Town Improvement Turst, Jagraon, was created in 1961,—*vide* Punjab Government Notification No. 6887-4CIII-60/32294, dated the 7th August, 1961. But it was dissolved,—*vide* Punjab Government Notification No. 20343-IDLG-67/12000, dated 20th July, 1967.

beyond its limits by the State Government through a notification as has been done in the case of the Ludhiana Improvement Trust[19].

The Ludhiana Improvement Trust, Ludhiana, was established in June, 1959,[20] but it started functioning effectively in 1962, the first three years having been spent in working out details of development and improvement and framing concrete proposals. It has framed a two-fold plan of setting up new residential colonies for the middle and low-income groups and for giving a face-lift to the city by beautifyng central places, replacing old and shabby structures with modern ones and widening of important crossings.

Town Planning Schemes:—The Municipality Trust has undertaken the following town planning schemes :—

(a) Town Planning Scheme for the land of Fateh Chand and others known as Kundanpuri,

(b) Town Planning Scheme for the area bounded by Sheep Shank Road, Emerson Road, Bhai Bala Road (Part A, B and D),

(c) Town Planning Scheme for the area bounded by Rajpura Road, Ehsan Road and Water Works Road (Part I and II),

(d) Town Planning Scheme for the land of S. Bachan Singh and others near Encamping Ground (Part B and C),

(e) Town Planning Scheme for the area known as Bharat Nagar,

(f) Town Planning Scheme for the area bounded by Rajpura Road, Police Lines and Government College and Tagore Nagar (Part A),

(g) Town Planning Scheme for the area bounded by Bharat Nagar Schemes etc. S. Bachan Singh Scheme and others known as Sub. Kartar Singh (Part B),

(h) Area bounded by Cemetry Road known as Spring Fields, and

(i) 36 more areas have been declared unbuilt areas for which Town Planning Schemes are under contemplation.

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[19] *Vide* Punjab Government Notification No. 62C-44-/8988-LGTI,dated 3rd February 1944, No. 16CI(10CI)-59/17832, dated 28th May, 1959, and No. 1661(1061)-59/17836, dated 28th May, 1969.

[20] *Vide* Punjab Government Notification No. 2134-5CIII-60/59104, dated 1st November. 1960.

By March, 1966, the Trust had developed certain residential colonies in different localities with a total provision of more than one thousand building sites of sizes varying between 200 and 2000 sq. yards. All modern amenities, such as metalled and tarred roads, water-supply, underground drainage, street lighting, etc. have been provided. Loans for the construction of houses were advanced under the Low and Middle Income Housing Schemes. The new residential colonies are :—

(1) Tagore Nagar;

(2) Tagore Nagar Extension:

(3) Shaheed Udham Singh Nagar :

(4) Moti Nagar ; and

(5) Shaheed Kartar Singh Sarabha Nagar ;

Besides, Model Town Extension and Bharat Nagar Extension Schemes are also in advanced stages of development.

With a view to accommodating low income group people, a Cheap Housing Colony has been developed on 17 acres of land near Qadwai Nagar. Small plots, measuring about 133 sq. yards each, have been allotted by draw of lots on no-profit no-loss basis to families having a monthly income up to Rs. 200 at a reasonable price and on easy terms.

A few commercial centres have also been constructed. The Lajpat Rai Market, consisting of 30 shops on the ground floor and office building of 30 shops on the ground floor and office buildings on the first floor was constructed in 1963. Jawahar Market, a three-storeyed building opposite the Clock Tower on the G.T. Road, was completed in 1965 at a cost of about Rs 6 lakhs.

At the intersection of the main roads of the city, the existing carriageways were narrow and in spite of traffic control traffic jams and the consequent hazards and inconvenience to the public were perpetual features. To remove the irksome bottlenecks the Bharat Nagar Chowk, Link Road and Gill Road Crossing, and G.T. Road and Link Road Crossing have been widened.

Slum Improvement and Clearance.—Slums are the plauge-spots of city-life, particularly in big cities. Urban local bodies have a major responsibility to tackle the problem of slum clearance, but they have not been able to solve the problem effectively[21]. The Second and Third Five-Year Plans provided a programme of slum clearance and improvement.

21. Slums, *like the hydra of Greek mythology*, are hard to be extirpated. While these are cleared in one city or locality, they mushroom in another. The Planning Commission, therefore, remarked that while steps were being taken to clear or improve the existing slums, it was equally important that new slums should not be allowed to grow up (*The Third Five Year Plan, p. 668*).

Under the Slum-Clearance Scheme for the Islam Ganj area, 72 double storyed tenaments were constructed up to 1963 at a cost of rupees four lakhs for the slum oustees.

The main sources of income of the Trust are sale proceeds of developed sites, recurring income from revenue-earning schemes and municipal contribution equal to 2 per cent of the gross annual income of the municipality. Besides, loans and grants are also given by the State Government for some large projects to be undertaken by the Improvement Trusts.

(d) **Panchayati Raj.**—The Panchayati Raj or Village local government is expected to play a vital role in the social and economic regeneration of rural life in the State. The new system of popular government was inaugurated in the Punjab on October 2, 1961. The origin of Panchyati Raj, may be traced back to remote antiquity. During the ancient period of Inian history, the form of local administration had proved very useful. Through the Afghan, Turkish, Mughal and Sikh period the form of local administration continued though with somewhat dimmed glory and diminished vigour. The advent of the British rule in 1849 virtually sounded its death-knell. During the post-freedom era, the development of the institutions of rural local government in the State has received steady and sustained attention. The establishment of Panchyati Raj has passed through three distinct phases; the establishment of a network of Panchyats at the village level; the withering away of the tottering and lately moribund instituions of the district boards and the establishment of Panchayat Samities and Zila Parishads at the block and district levels, respectively. The Gram Panchayats, Samities and Zila Parishads have thus all been integrated into a hierarchical organism-the Panchyati Raj. These representative local institutions are designed to serve as nurseries of democracy and the avenues for the political training and education of the masses for the management of local affairs.

The Panchayati Raj Organisation operates under the administrative control and guidance of the Panchayat and Development Department at the State level. For the supervision and guidance of Gram Panchayats—the primary units of the Panchayati Raj—there is at the State headquarters a Directorate of Panchyats, with the Director of Panchyats at its head. The Director is assisted by a Deputy Director of Panchyats, 3 Assistant Directors of Panchayats, 3 Educational Panchayat Officers and 6 Education and Panchayat Officers. At the district level, there is the District Development and Panchayat Officer.

The three-tier structure of the Panchayati Raj—the Gram Panchayat at village level, the Panchayat Samiti at block level and the Zila Parishad at the district level—require a detailed description of their working.

(e) Gram Panchayats[22]

Historical background:

From the earliest times the village appears to have been the basic unit of administration. It continued to be a corporate political unit throughout history. During the Mauryan period India was united under a strong central government; but the traditional rights of the village communities and their powers of local self-government were not ignored in the bureaucratic set-up of the Mauryan empire. In the Gupta period, the pyramidial governmental structure was based on the administration of each village through the village assembly. Frequent dynastic changes, that intervened between the fall of the Gupta empire and the conquest of Northern India by the Muslims, did not seriously affect the age old local organisation of village communities-- the bedrock of early Indian polity. The village panchayats continued to be viable units with adequate and diversified financial resources at their disposal for discharging their manifold duties.

The Afghan and Turkish invasions did not materially affect the tenor of life of village communities and their well-tried system of self-government. Under the Sultanate of Delhi (A.D. 1206—1526), the unit of administration was the village with its headman called *muqaddam* or *mukhiya* and accountant or patwari and the village communities continued to function in accordance with their old traditions. The Government dealt with the peasant through the headman[23]. Under the Mughal empire, the villages were allowed to manage their own internal affairs in the traditional manner[24]. But, the villages of the Mughal empire enjoyed parochial self-government rather than local autonomy[25]. While the village communities were left free in the management of local affairs, they had lost the influence they possessed under Hindu rule and the village elders were no longer addressed in terms of respect which belonged to the royalty[26]. Thus, under centuries of Afghan and

22. 'Panchayat' comes from the Sanskrit word "*panch*" (five) and means literally a council of five. But this numerical connotation did not always apply to village panchayats.

The law relating to Gram Panchayats was first enacted under the Punjab Gram Panchayt Act, 1952, as subsequently amended upto 1961.

23. I.H. Qureshi, *The Administration of the Sultanate of Delhi*, (Lahore, 1942) *pp. 11 and 194.*

24. S.R. Sharma, *The Making of Modern India* (Bombay, 1961) p. 134.

25. Jadu Nath Sarkar, *Mughal Administration* (Calcutta, 1935), p. 35.

26. Havel, E.B., *The History of Aryan Rule in India* (London, 1918), p. 425.

Mughal rule, the power of self-governing village communities decreased and their influence waned though their break-up did not begin till the advent of the British rule. Temporarily, the position improved under the Sikh rule when the village communities continued to manage their local affairs and lived in their full integrity[27] as a result of loose control of the Central authority and rough and ready system of administration under the Kingdom of Lahore. The soundness of the principle of local authority was further proved during period of anarchy that followed the death of Maharaja Ranjit Singh.

The growth and development of Village Panchayats in the British period presents a gloomy picture. After the enactment of the Punjab District Boards Act, 1883, the whole subject of Local Government was reviewed during 1907—09 by the Royal Commission on decentralisation. It made certain recommendations regarding the rural Boards and Village Panchayats. The Government of India was averse to the setting up of satutory village panchayats in the Punjab as described by the Royal Commission on decentralisation. However, the Village Panchayat Act, 1912 (Punjab Act XI of 1912), was enacted to establish panchayats in the Punjab to assist the Government in the administration of Civil justice. The functions of all such bodies were limited to the disposal of petty rural suits with the consent of the parties concerned. The panchayats thus organised were given no administrative powers of taxation nor were these allowed to explore independent financial resources. The statutory panchayats never took and did not show any prospect of becoming popular in the countryside.

The next step in the development of Local Self-Government in the rural areas was taken under the Punjab Village Panchayats Act 1921. The panchayats under the Act were assigned specified administrative as well as judicial functions. Still the panchayat movement did not make any significant progress in the early years of dyarchy (1919-1937). This was probably due to the fact that there was little demand for any extension of the system. For one thing the financial resources of the panchayats were extremely meagre. For another the work of the panchayats, except in the disposal of petty criminal or civil cases, was negligible. They could achieve precious little in regard to the improvement of village santitation. The panchayats displayed no enthusiasm in the exercise of the administrative powers entrusted to them. It may, however, be said that the experiment proved to be of considerable educative value.

The Punjab Village Panchayat Act, 1921, was repealed and replaced by the Punjab Act XI of 1939 with the same title. New set of rules were required thereunder to be framed for the proper functioning of the panchayats in regard

27. *Punjab Administration Report* for 1849-50 and 1850-51, (Lahore, 1853), p. 11.

to their administrative, criminal judicial and civil judicial duties. The revenues of the panchayats were to be derived from grants made by the Governments or the local bodies and sums other than judicial fees and fines. The panchayats were allowed to levy taxes with the previous sanction of the Provincial Government.

Even under provincial autonomy (1937-47) the working of Village Panchayats continued to be more or less the same as it was during the period of dyarchy (1919-37). The panchayats did not show enough interest in the exercise of their administrative functions and devoted all energies to the judicial work. This was perhaps due to the fact that in the judicial sphere the panchayats were practically autonomous while in the exercise of administrative powers they were subject to considerable control by Government. Their financial resources were too meagre even to meet their elementary needs. The panchayats did not resort to direct taxation for fear of public displeasure. In short even this determined attempt to recreate the Village Panchayats did not make much headway in the face of formidable difficulties detailed above.

The growth and development of rural Local Government up to 1947 presents a disheartening picture of halting, tardy and fitful evolution. The post-independence period, however, has ushered in a new phase, which has brought about a revolution in the concept of rural Local Government and its role in the regeneration of the rural community. Local Government both in urban and rural spheres, has become an integral part of the national administration.

As a preliminary measure in the process of democratisation of the District Boards and the Panchayats adult universal suffrage was introduced and the system of nomination was completely abolished. The next step under the new concept of democratic decentralisation was inauguration of an integrated system of rural Local Government at all levels. The new structure thus evolved has been christened as Panchayati Raj.

The Local Finance Enquiry Committee appointed by Government of India in 1949 released its report in 1951. The Taxation Inquiry Commission published its report in 1954. The Planning Commission has devoted a great deal of attention to the problem of Local Government, especially the panchayats as instruments of rural development. Far reaching recommendations on the reorganisation of Local Government have been made as a result of the deliberations of all these august bodies. The directive principle of State policy on Village Panchayats embodied in Article 40 of the Constitution of India has been vigorously implemented in the Punjab. In pursuance of the All India policy the State Government enacted the Punjab Gram Panchayats Act, 1952 (Act IV of 1952), which has replaced the Punjab Village Panchayat Act, 1939. The Act is a landmark in the history of the panchayat movement in the Punjab. It has

further been amended[28] without, of course, altering the basic structure of village autonomy as envisaged in the principal Act.

(i) **Organisation and Functions.**—The Gram Panchayat forms the base of the pyramidial structure of Panchayati Raj. Its jurisdiction extends over a village or group of contiguous villages, generally with a minimum population of 500. All persons, entered as voters on the electoral rolls for the Vidhan Sabha, for the time being in force in the area, are members of the Gram Sabha, The Sabha has all the attributes of a municipal corporation. The institution of Gram Sabha and the role assigned to it are calculated to secure popular indentification and participation not only with the village local government ; but also with the general economic planning in the rural area.

A Gram Sabha elects from among its members a chairman, called Sarapanch, and an executive committee, called the Gram Panchayat, consisting of 5 to 9 members (including the Sarpanch), called Panches. Provision has been made for the representation of women and members of Scheduled Castes and Scheduled Tribes on the Gram Panchayat. The term of office of Panches and Sarpanch is 5 years. Representation of members of Scheduled Castes and Scheduled Tribes on the Gram Panchayats is ensured up to January 26, 1970.

There are 669 panchayats in all the ten blocks in Ludhiana district. The details whereof have been given in the chapter "General Administration".

The functions of the Gram Panchayats may be grouped under two broad categories, viz., administrative and executive, and judicial, both of which are discharged by the same body.

The Gram Panchayats have been invested with a very wide range of administrative and executive functions relating to agriculture, animal husbandry, health and sanitation, pisciculture, forests, public works, sports and recreation and general. The scope of their function is, thus, large enough to embrace all aspects of social, civic and economic life of rural communities. The scope is purposely kept flexible so that the Government can supplement it with more functions and adequate resources for the discharge of additional functions.

The judicial functions of panchayats may be classified into three categories, viz., criminal, civil and revenue. The procedure in the panchayat courts is fairly simple and informal, calculated to secure speedy and inexpensive justice[29].

One of the key functions of panchayat is to frame development programme for the Gram Sabha area for the consideration of the Gram Sabha. The role of the panchayats in the work of preparation and implementation of local development programme and community development at the village level has been greatly emphasised in the Five-Year Plans.

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28. Vide Punjab Acts, XV of 1954, XXX of 1954, XXXII of 1956, and XXVI of 1960.

29. For details, refer to chapter 'Law & Order and Justice,' pages 483-84 and 486.

(ii) **Financial Resources.**—There is a Sabha Fund for each panchayat. The principal sources of panchayat revenue are Government grants, income from common (*shamlat*) lands assignment of 10 percent of land revenue and voluntary contributions. The panchayats are empowered to impose a variety of taxes (e.g. house tax, professions tax, etc.) and raise fees. The Sarpanch is responsible for the custody and proper maintenance of the Sabha Fund in the prescribed manner. He also operates upon it.

Finance is the crux of Panchayati Raj both at the panchayat and Samiti levels. Proper tax administration and additional sources of revenue are needed.

The income of panchayats during 1959-60 to 1965-66 is given in the following pages.

(f) Panchayat Samitis

(i) **Organisation and Constitution.**—The Panchayat Samiti at the block level is the intermediate unit of Panchayati Raj in which it has to play the most important role. In the National Extension and Community Development Programme the block is the unit of operation representing an average of 100 villages with a population of 60,000 to 70,000 persons spread over an area of 150 to 170 square miles.

What has been hitherto missing in the Indian political structure, both under the British rule and since independence, is a local political self-governing unit which would express the will of the people at the grass-roots level and mobilize the energies and enthusiasm of the country's millions of villagers for the national task of re-construction. The Panchayat Samiti has been envolved to supply this missing self-governing unit in the hierarchy of the political structure, While the Gram Panchayat is the foundation stone of the Panchayati Raj edifice the Panchayat Samiti is its bulwark.

The Community Development Block is the unit of jurisdiction of a Panchayat Samiti. In the structure of Panchayati Raj, the block has emerged not only as a unit of socio-economic development ; but also as a principal unit of rural local government and administration.

From October 2, 1961, a Panchayat Samiti was constituted for every block in a district in the State. Thus, there are ten Panchayat Samitis in Ludhiana District, one each in the ten blocks, at Ludhiana, Mangat (at Salem Tabri), Pakhowal, Dehlon Sidhwan Bet, Jagroan, Sadhar, Samrala, Machhiwara and Doraha.

The constitution of a Panchayat Samiti is multiplex and broad-based. It comprises four distinct categories of members as under :

(i) 19 primary members to be elected as follows :—

(a) 16 by Panches and Sarpanches of Gram Panchayats in the block, from amongst themselves ;

(b) 2 members elected by co-operative societies within the jurisdiction of the Panchayat Samiti, from amongst themselves ; and

(c) 1 member elected by the market committees in the block, from amongst producer members residing within the jurisdiction of the Panchayat Samiti.

(ii) Associate members, viz., every member of the Punjab Vidhan Sabha representing the constitutency of which the block forms part, provided he is not a primary member ; and such member (s) of the Punjab Vidhan Parishad as the Government may specify.

(iii) Every Panchayat Samiti must have atleast 2 women and 4 members of the Scheduled Castes and Scheduled Tribes as its members.

(iv) *Ex-officio* members consisting of a Sub-Divisional Officer, having jurisdiction in the block, and the Block Development and Panchayat Officer.

Every Panchayat Samiti elects its chairman and vice-chairman from among its primary and co-opted members. The normal term of office of primary and co-opted members as also of the chairman and vice-chairman is 5 years.

(ii) **Executive Authority.**—The Block Development and Panchayat Officer is the *ex-officio* Executive Officer of the Panchayat Samiti and is under its administrative control. The Executive Officer is, however, not the sole repository of the Executive power of the Panchayat Samiti. It is bifurcated between the Chairman and the Executive Officer, the residuary executive power vesting in the former.

The Block Development and Panchayat Officer, as the Executive Officer of the Panchayat Samiti, is the linch-pin of the organisation. He has to play a key-role, particularly in the implementation of the community development programme.

In its administration, a Panchayat Samiti has dealings with three classes of officials, viz., (1) those who are directly employed by it ; (2) Government servants who are placed by Government at the disposal of the Samiti ; (i.e. the entire complement of servants of the Development and Panchayats, Agriculture, Animal Husbandry, Industries and Health Departments operating at the block level) ; and (3) Government servants (officers of the Public Works, Education, Medical, Public Health or other Departments) serving in the block, who may be

required to attend its meetings, to tender advice in respect of any matter which concerns the Department to which the officer belongs. The Samiti has also dealings with the Deputy Commissioner and Commissioner who are required to exercise certain statutory powers of supervision and control on the Samiti.

(iii) **Functions and Powers.**—The Panchayat Samitis have the most active role to play in the all round development of the villages. Their functions may be grouped in the following broad categories :—

(1) Obligatory functions embracing a variety of matters under the following major heads :—

(a) Agriculture

(b) Animal Husbandry and Fisheries

(c) Health and Rural Sanitation

(d) Communications

(e) Social Education

(f) Co-operation

(g) Miscellaneous, including development of cottage and small-scale industries, maintenance of serais, rest houses, public parks and gardens, management of public ferries and cattle pounds, registration of births, deaths and marriages, and any other local work likley to promote the health, comfort, covenience and interest of the public or the social and cultural advancement or the economic prosperity of the country as well as functions previously performed by the District Board concerned.

(h) Such additional functions or specified duties as Government may entrust to a Samiti.

(2) Optional functions : A Samiti may, with the approval or at the suggestion of the Zila Parishad, provide for any matter other than those set out above.

(3) Agency functions, i.e., functions entrusted to Panchayat Samitis by Government.

The Panchayat Samitis have wide administrative powers of which the more important are as under :

(a) Power to frame bye-laws on a variety of subjects.

(b) Power to acquire land or other immovable property.

(c) Power to contribute towards joint works and undertakings.

(d) Powers under the Punjab Municipal Act, 1911, which the Government may authorise Samitis to exercise.

(e) Power to delegate to the Chairman, Vice-Chairman, the Executive Officer or any other Government servant, all or any power conferred upon the Samiti, except the power to make bye-laws.

(f) Supervisory power over the panchayats.

(iv) **Financial Resources.**—A composite Samiti Fund is vested in the Panchayat Samiti. Its components are :—

(1) apportionment made by the Government out of the balance of district fund at the credit of District Board concerned ;

(2) all proceeds of local rate allotted to the Panchayat Samiti under section 63 of the Punjab Panchayat Samitis and Zila Parishad Act, 1961 ;

(3) the proceeds of all taxes, cesses and fees imposed by the Panchayat Samiti under the Act ;

(4) all funds allotted to the Panchayat Samiti and income arising from all sources of income placed at its disposal under section 62 of the Act ;

(5) all rents and profits accruing from property vested in or managed by the Panchayat Samiti ;

(6) all sums contributed to the Samiti by the Central or State Government or by any local authority including Gram Panchayats or any private persons ;

(7) all sums received by the Panchayat Samiti in the discharge of functions exercised by it under the Act ;

(8) all sums paid by the Government to the Panchayat Samiti to meet expenses for the performance of agency functions ;

(9) all grants made by the Government for the implementation of Community Development Programme ; and

(10) the proceeds of all sources of income which the Government may order to be placed at the disposal of the Panchayat Samiti.

The income of the panchayats in the district during the years 1959-60 to 1965-66 was as under :

Year		House Tax	Grants-in-aid	Voluntary contribution	Total
		Rs.	Rs.	Rs.	Rs.
1959-60	..	41,719.59	2,91,508.68	34,052.12	3,67,280.39
1960-61	..	60,708.21	3,43,146.56	35,082.10	4,38,936.87
1961-62	..	57,624.00	4,36,049.19	44,212.47	5,37,885.66
1962-63	..	74,359.10	3,65,499.55	50,884.78	4,90,743.43
1963-64	..	1,02,934.20	4,57,673.71	65,570.99	6,26,178.90
1964-65	..	1,27,419.57	4,82,812.03	41,817.54	6,52,049.14
1965-66	..	2,09,971.15	8,48,803.37	1,17,110.08	11,75,884.60

(g) **The Zila Parishad.**—The Zila Parishad stands at the apex of the structure of Panchayati Raj. As in the case of Municipal Government in the towns, the development of Local Self-institutions in the rural areas was also a slow process. In the Punjab, before 1871, each district had a District Committee, which was merely an Advisory Body. Under the rules framed by the Punjab Government in pursuance of the Local Bodies Act, 1871, these Committees were made administrative bodies and were believed to have done "excellent work[30]." The District Committees were required to control :—

(1) the funds which were raised under the Punjab Local Rates Act of 1871, and

(2) certain land cesses imposed at the time of land settlements for expenditure on roads, schools and other sundry local purposes.

The Committees comprised of nominated officials and non-officials in the proporation of 2/3 and 1/3, respectively.

In their actual working the Committees were not found very useful : "They met with reluctance and took little interest in their duties. Their administration remained practically with the district officers[31]".

The District Boards Act, 1883 (The Punjab Act XX of 1883) provided for the establishment of regular District Boards. Discretion to set up Local Boards or sub-District Boards was, however, left with the Provincial Government, which was given the power to fix the number of members of each class of Board subject to a minimum of 6, and to decide whether appointment should be by election or nomination or by a combination of both. The proportion of official members was ordinarily not to exceed 1/3 of the total membership. The Government was empowered to decide whether the Chairman should be

30. *The Imperial Gazetteer of India,* Vol. XX, p. 354.

31. *Ibid.*

elected or nominated. The District Boards were generally called upon to take measures for the safety, health and convenience of the people within their jurisdiction. The powers of direction, superintendence and control were vested in the Deputy Commissioner, the Commissioner, and the provincial Government. These powers related to the creation, supersession and abolition of the Boards. The modification of the territorial limits of the Boards, the levy of new taxes, sanction of budget, suspension and revocation of orders and resolutions of the Board on specified grounds could also be done by the Government.

As a source of income of the District Board the main tax was the local rate, which was to be levied on the annual value of land. The maximum was to be not more than 12 Pies (1/16 of rupee) of the total annual value of land.

The Local Boards were to be the agents of and subject to the control of the District Boards. They were required to perform specific functions entrusted to them by the parent Board.

The system of rural Local Government lauched under the Act XX of 1883 did not achieve any success because there was no provision for the creation of Village Panchayats. The progress made by the rural Local Board was reviewed in the Government of India resolution of 1897. The policy pursued so far in any case did not undergo any change nor promised any marked advance. The dictum of centralisation and efficiency followed by Lord Curzon (1898-1905) proved a serious set back in the sphere of Local Self-Government. The laudable policy of "political and popular education" enunciated by Lord Ripon was further undermined and the position of '*Burra Sahibs*' and departmental experts was further strengthened.

The Punjab District Boards Act, 1883, remained in force without any material alteration up to 1919. The local rate continued to be the principle source of revenue of the rural Boards. Elections to the District Boards had lost their importance and evoked little interest. In fact even the candidates for memberships were hard to find[32].

It is to be regretted that the elective principle was not generally appreciated and there were very few contested elections. Nomination was considered a greater honour than election[33].

The non-official members were indifferent towards the administration of the District Boards. Any proposals to augment the financial resources of the District Boards were vehemantly opposed[34].

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32. *Statement Exhibiting Moral and Material Progress and Conditions in India*, 1909-10 p. 107. (London, 1911)

33. *Statement Exhibiting Moral and Material Progress and Conditions in India*, 1902-03 to 1911-12, p. 122. (London, 1913)

34. *Statement Exhibiting Moral and Material Progress and Conditions in India*, 1915-16, p. 158.

Efficiency or progress of the District Boards thus came to depend mainly on official stimulus. Outside control was so comprehensive that there was little scope for local initiative or any earnest effort by the non-official members. The Government of India Act 1919 contained specific provisions for the improvement of Local Self-Government both in the rural and urban spheres. The Punjab Legislative Council framed election rules for the District Boards in the Punjab Act XX of 1922. The same were, however, replaced by the rules adopted in 1933. The new rules aimed at lowering the franchise, increasing the elected element and transferring the executive direction to non-officials. The reforms did not, however, produce any marked imporvement in the working of the District Boards.

Under the Provincial autonomy introduced in the Punjab in 1937 the development of Local Government received fresh impetus and legislation was enacted for further democratisation of Local Government.

Elections to the District Boards continued to follow the old pattern. A large number of members were returned unopposed . The candidates thought much better to settle matters amongst themselves in order to avoid the expenses on contested elections. In 1937-38 only 3 seats out of the total membership of 30 were contested in Ludhiana District. The review of the working of the District Board in the Punjab in general and the district in particular does not present a picture of vital, democratic and efficient working of the Local Self-Government. On the eve of independence in 1947 the rural local bodies were far from being in a healthy position. They were practically effect or dead-alive institutions, which were constantly drifting for want of any definite goal before them. It may thus be concluded that the District Board Act, 1883, remained in force without any radical changes until the introduction of the Panchayati Raj in 1961. Even though the parent Act of 1883 was amended in 1953 to provide for completely elected district Boards, the old style organisation proved to be too stagnant to be revived for their proper working, The district Boards had become supine, static and anachronistic. Their day-to-day administration was marked by fissiparious tendencies. In view of the unsatisfactory state of affairs the normal constitution of the District Bords was suspended in 1954. In their place a new temporary set up was introduced. Under the interim arrangement the District Boards were to consist entirely of official members and persons appointed by the Government with the Deputy Commissioner as the *ex-officio* Chairman.[35]

The make-shift machinery continued till the encatment of the Punjab Panchayats Samitis and the Zila Parishads Act (1961).

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35. The Punjab District Boards (Temporary Constitution) Ordinance, 1954, replaced by the Punjab District Boards (Temporary Constitution) Act, 1954.

The Act provided for the constitution of elective Panchayat Samitis at the Block level and Zila Parishads at the district level in the place of the old Districts Board. The panchayat samitis and the Zila Parishads are further closely linked up with the Gram Panchayats as the units of Local Government and rural development[36].

The Samitis have thus become the operative units and have assumed the functions previously performed by the District Boards as well as the Community Development Department. The main role of the Zila Parishad under the new set-up is to advise, supervise, and co-ordinate the functions of the Panchayat Samitis in the district.

The Act thus marks an epoch in the history of rural Local Government in the Punjab. It has heralded the dawn of Panchayati Raj, the cherished dream of Mahatama Gandhi—an ardent apostle of rural democracy.

(i) **Constitution.**—The Zila Parishad consists of elected members (two members per block out of the primary members of all the panchayats in a block, elected by the Panchayat Samiti concerned); Chairman of every Panchayat Samiti in the district; the Deputy Commissioner; associate members (comprising members of Lok Sabha, Punjab Vidhan Sabha and Punjab Vidhan Parishad representing the district or any part of it); and co-opted members (confined to women and members of Scheduled Castes and Scheduled Tribes). Representation of women and members of Scheduled Castes and Scheduled Tribes on the Zila Parishad has been ensured through co-opted members, as under :

सत्यमेव जयते

Two women if there is none among the elected members; and if there is only one woman among the elected members then one more woman is to be co-opted.

Five members of Scheduled Castes and Scheduled Tribes, if there is none among the elected members; and if only one, two, three or four such persons get elected the four, three two or one such person (s) respectively are co-opted.

The term of office of a Zila Parishad is, like that of a Panchayat Samiti, five years. A Zila Parishad has a Chairman and a Vice-Chairman elected by members (excluding associated members i.e., M.Ps. M.L.A.s, M.L.C.s., and *ex-officio* members, i.e., Deputy Commissioner, who have no right to vote at any meeting of the Zila Parishad) from amongst themselves.

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36. *Statement of Objects and Reasons*, Punjab Government Gazette Extraordinary, 1960, page 1010.

The District Board, Ludhaina, was abolished in February 1962, and the Zila Parishad Ludhiana, was formed in March, 1962. In March 1966, the Zila Parishad consisted of 30 elected, 1 *ex-officio,* 14 associated and 5 co-opted members. The Deputy Commissioner is the *ex-officio* member.

(ii) **Financial Resources.**—The main financial sources of the Zila Parishad are Goverment grants, share of local rate and funds allotted to it for implementing departmental schemes. It has no independent powers of taxation.

The Zila Parishad Ludhiana is paying contribution to the provincialized civil hospitals in the district; T.B. Clinic Ludhiana and Mental Hospital, Amritsar. It has also constructed some roads viz. Akhara-Hatur Road (Class II), measuring 9⅜ kilometers, Dugri-Dhandra Road (Class II), measuring 1⅜ kilometers, Sarabha-Raikot Road measuring 3/15 kilometers, Jodhan-Narangwal Road measuring 6 kilometers, and Alour-Kheri Road (Class II), measuring 8 kilometers.

The income and expenditure of the Zila Parishad during the years 1962-63 to 1965-66 were as under :

Year		Income	Expenditure
		Rs.	Rs.
1962-63	..	16,56,040	11,05,999
1963-64	..	17,62,364	13,41,041
1964-65	..	15,37,686	11,01,620
1965-66	..	12,90,477	12,20,412

(*Source* : Secretary, Zila Parishad, Ludhiana.)

CHAPTER XV

EDUCATION AND CULTURE

(a) Historical background

The Ludhiana City owes its existence to the Lodhis towards the close of the fifteenth century. The principal Town or the surrounding area included in the district cannot boast of any notable centres of learning in the early times. In keeping with the general tradition, however, the old system of education in vogue in ancient and medieval period may be expected to have been followed in some form or the other. The primary object of education in the olden days appears to be the religious initiation of the pupil. The teacher had to teach the pupil how to perform the religious duties in the prescribed manner. This teaching, however, implied a certain amount of General Knowledge, Grammar, Mathematics, Mythology, perhaps Astrology, etc. The basic purpose of all education was essentially religious and personal. This system appears to have been followed all through the middle ages.

Under the Mughals, an attempt was made to follow a systematic educational policy in order to promote learning among as wide a section of the people as possible. From the earliest times Indian parents and rulers were conscious of their duty to give their children and subjects at least an elementary education. The personal and religious character of education in any case was maintained throughout the period. Individual teaching was generally practised especially among the higher classes and the nobility in particular. The teacher had the pupil all to himself. Education was looked upon as a personal or a family concern. The teacher had to live with the pupils, talking and listening to them, observing them or being observed by them. Since earning of living had not yet become the principal aim of education, this less business like but certainly more scientific attitude was consistently followed.

Dr. Leitner, the ardent protagonist of traditional system of education in the Punjab, had paid a glowing tribute to the reverential popular attitude towards education in Pre-British Punjab in the words :—

> "Respect for learning has always been the redeeming feature of 'the East'. To this the Punjab has formed no exception. Torn by invasion and civil war, it ever preserved and added to educational endowments. The most unscrupulous chief, the avaricious money-lender, and even the freebooter, vied with the small landowner in making peace with his conscience

> by founding school and rewarding the learned. There was not a mosque, a temple, a dharamsala that had not a school attached to it, to which the youth flocked chiefly for religious education. There were few wealthy men who did not entertain a Maulvi, Pandit or Guru to teach their sons, and alongwith them the sons of friends and dependents. There were also the secular schools, frequented alike by Mohammadans, Hindus and Sikhs, in which Persian or Lande were taught. There were hundreds of learned men who gratuitously taught their co-religonists, and sometimes all comers, for the sake of God, 'lillah'. There was not a single villager who did not take pride in devoting a portion of his produce to a respected teacher. In respectable Mohammadan families husbands taught their wives, and these in turn taught their children ; nor did the Sikhs prove in that respect to be unworthy of their appellation of "learners and disciples". In short the lowest computation gives us 3,30,000 pupils (against little more than 1,90,000 at present) (1882) in the schools of various denominations who were acquainted with reading, and writing."[1]

The state of education in the Ludhiana district in the middle of the 19th century was both antiquated and backward. The indigenous method of education, according to the Ludhiana Settlement Report of 1853, was very primitive ; "In the district there are some sixty schools, where the children of the mercantile class receive the education necessary to enable them to carry on their trade. These schools are very crude. The younger boys may usually be seen acquiring the rudiments of arithemtic, with the finger for a pencil, and the sand on the ground at the doorway for a slate. Among the agricultural classes, generally, there is no attempt at education. In some of the higher families, as of jagheerdars, or others possessed of property exceeding the usual amount of an ancestral share in a village community, a reader of the "*Grunth*" may be found, who imparts instructions, to the extent of reading and writing Goormookhee. The young girls are likewise thus far instructed. Such a teacher, if not permanently attached to the family, usually resides in it some six or seven years, and the children of other neighbouring families, are similarly admitted to share in the instruction.[2]

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1. G.W. Leitner, *History of Indigenous Education in the Punjab Since Annexation and in 1882*, p. (i).

2. H. Davidson, *Report on the Revised Settlement of the District of Ludhiana in the Cis-Sutlej-States*, 1853, pp. 29-30.

The first step in the formation of the (Punjab Education) Department was the appointment of the D.W. Arnold to the post of Director of Public Instruction at the commencement of 1856. That officer immediately drew up a scheme which provided for the introduction of a system of education suitable to the requirements of the Punjab.

The scheme was based upon the principle of making existing indigenous village schools the nucleus of a new improved and organised system. These schools were to be searched out and fostered ; they were to be aided by contributions from the yield of the 1 per cent school cess and thus partly supported by a system of grants-in-aid, they would become in some degree amenable to Government supervision. The aim was to secure the introduction and substitution of useful and systematic instruction of an elementary character in place of the desultory impracticable course of study then existing.

At the same time it was proposed to open out new sources for the provision of instructions, and to set up a higher standard than the village school could be expected to attain by the establishment of district Government institutions supported wholly by the State.

Under the provision of the Honourable Court's despatch, 1854, the scheme contemplated also the introduction of the system of grants-in-aid that is, affording pecuniary aid/assistance to mission and other private schools unconnected with Government institutions.

According to the Punjab Administration Report for the year 1958-59, there was a Government *zillah* or district school at the district headquarters. In addition to this, there were three types of schools in which the medium of instruction was exclusively vernacular. These were Government tahsil schools, the village schools-maintained by the cess of one per cent on land revenue, and the indigenous schools, which were independent of Government control unless supported by grants-in-aid. In the last mentioned category, the plan of study was purely native and the instruction generally crude and vicious. But the machinery of the Education Department was sytsematically employed in the creation and improvement of the tahsil and one per cent village schools.[3]

The position of indigenous education in the district in 1882 is described by G.W. Leitner as under :

> "It has been shown above that the scheme of education was based upon the principle of making the existing indigenous schools the nucleus of a new and improved system. Practically this

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3. *Panjab Administration Report for the year* 1958-59, paras 32-33.

part of scheme has failed. These schools, as they then existed, scarcely deserved the name ; for the most part they consisted of assemblies of lads collected at the thresholds of mosques and temples, and taught by the priestly attendants to repeat passages from Koran or Shasturs. In a few instances this course of study may have been varied by a little secular instruction of desultory and fantastic characetr. It was found impossible to elevate the standard of these schools. The teachers were firmly wedded to their old, time-honoured but useless system, and they adhered to it in all its integrity, readily accepting the additional aid afforded them from the yield of 1 per cent school cess, but quite ignoring the fulfilment of the conditions on which such aid was granted. They neglected to adhere to the simple rules furnished for their guidance, and they failed to introduce the scheme of secular studies proposed by the officers of this department. Moreover, those who had originated these schools, as soon as they observed a prospect of obtaining aid from the yield of cess, attempted to withhold their own contributions, and to throw the whole burden of support on the village school fund."[4]

During the second half of the 19th century Sardar Sir Atar Singh K.C.I.E. Chief of Bahadaur (in the present Sangrur District) was always prominent in matters connected with the education and intellectual improvement of the people. Having been educated at Varansi he had acquired a taste for learning. He resided principally at Ludhiana where he had built a magnificent house known as the Bahadaur House. He had acquired a great amount of local influence and rendered valuable services in the cause of learning. He started the teaching of Sanskrit and Persian and also established a public library at the Bahadaur House, Ludhiana which was well stocked with valuable manuscripts in Sanskrit Gurmukhi and Persian. After his death in 1896 the library along with its whole equipment was passed on to the Punjab Public Library, Lahore, in pursuance of his will.

The state of education in the district towards the last quarter of the 19th century may be summed up as follows :—

The returns of the Census of 1881 show that of the total population (6,18,835) 21,920 or 33 in 1,000, could either read and write or were under instruction ; only 552 of this number being females while one-third belonged to

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4. G.W. Leitner, *History of Indigenous Education in the Punjab, Since Annexation and in 1882*, Appendix VI, p. 23.

the towns. From among the rural population hardly 14,530, or 26 in 1,000 could read and write or were under instructions and most of these might be taken as belonging to the shop-keeping class. A few of the rising generation of agriculturists had received instruction in government schools and some of the older men who carried on business transactions kept account books in Gurmukhi. Learning was still confined to the official and trading classes. The district was, however, not backward in comparison with the average of the province at the time.

The number of those under instruction was, according to the 1881 Census, barely 4,962 in the whole district ; but the educational returns showed 4,235 attending government or aided schools ; and to this might be added 4,345 in the private schools making a total of 8,580.

There was a Government high school at Ludhiana and ten middle schools at important towns of Jagraon, Raikot, Khanna, Mahchiwara, Dehru, Sawaddi, Gujarwal, Raipur, Maloud and Baddowal. There were 60 primary schools for boys and 19 schools for girls. In addition to these Government schools, there were the aided American Presbyterian Mission High and Boarding Schools and the Church of England Zenana Mission Training Schools. There was also the aided Hindu School and a School of Industry run by the Ludhiana Anjuman Mufid-i-Am, the chief object of which was to encourage and improve the local industry of the town in carpet-making and shawl-making.

The Government High School, Ludhiana, was originally started as a private vernacular seminary on October 27, 1864, at the instance and with the aid of certain leading members of the Hindu and Muhammadan communities of Ludhiana, who felt it a desideratum, since there was no institution where secular education could be obtained, and many objected to send their children to the Mission School where religious instruction was compulsory. This private seminary became a Government grant-in-aid school in April, 1865, and was created a purely Government high vernacular school in 1870. In 1875 English was introduced in it, which brought a thorough change in its character, that is from a high vernacular school it was transformed into a high district school like those of Delhi, Lahore, Amritsar etc., with a vernacular department attached.

Towards the years 1878-83, there were 396 indigenous schools with an attendance of 4,345. These institutions were in Muhammadan villages under the charge of a *mullah* or priest, who gave instruction in the *koran* to a class of eight or ten pupils seated in the village mosque or *takia*. The school was called a *maqtab*.The boys merely learnt by rote from the master two or three chapters; but to this was sometimes added a little writing on a slate, and portions of some elementary Persian text books (*karima*, *Khaliqabari*, etc.); and it was only in

this case perhaps that the institution could rightly be called a school[5]. The *mullah* who was also the village priest, had generally a small piece of land given him, or received an allowance of grain, and also presents at odd times. *Lande* was taught to boys of the shop-keeping class in the village by a *pada* or master. The boys learnt to write on a slate, there being, of course, no books, as the character was purely commercial. Fees were paid by the parents; Re. 1 when the boy entered, another rupee when he could write the letters, and so on. Gurmukhi was taught in the *dharmsalas* by the *sadh*, who was probably in possession of an endowment, and also received presents from the parents. The instruction here, too, was by slates, the boy first learning to form the letters and then to write from dictation. An advanced boy would sometimes begin to read the *Granth Sahib*, but the use of books had not yet been introduced. These schools were of the most elementary character.

In the indigenous schools, the girls generally received instruction along with the boys, more or less of their own age, in *maktabs* of all sorts, but respectable Muhammadans, who observed *pardah*, did not allow their girls to attend. In their case, the *mullah* went to their parents' house to teach the *koran*., *nimaz*, *pakki roti*, etc., or, as long as the girl was a minor she went to the *mullah's* house, where she received similar instruction from his wife or some other woman of the house. Women did not as a rule attend the *makrab* or go to the *mullah's* house. They received instructions of a similar kind from educated members of their own family, if any such there would be. Missionary ladies, however, both Indian and European, went about in the towns and villages, and offered to teach a little reading, writing and arithmetic to women of respectable households, and the people frequently accepted their friendly help.

The script in common use was *lande*, in which the ordinary *bania* kept his accounts. In the towns, well-to-do merchants used the improved *lande* known as the *ashrafi*. Some Hindu Jats used Gurmukhi, and Brahmans used Devnagri for religious purposes. The Persian character was little used. Advertisements and signboards in English were quite common in Ludhiana town.

In the beginning of the present century, the literacy among the people of Ludhiana was above the average. It was largely due to the exertions of the Presbyterian Mission. The advance in this direction during the two decades from 1881 to 1901 was remarkable. In 1881, the proportion of literates *per mile* was 48 among males and 1 among females. In 1901, it was 83 among males and 4 among females. Of the small community of Christians, nearly half could read and write. Next came Jains with 315 *per mile* then Hindus with 63, Sikhs with 53, and lastly Muhammadans with 20.

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5. Walker, T. Gordon, *Final Report on the Revision of Settlement of the Ludhiana District*, 1878-83, p. 78.

Bhai Sahib Bhai Narain Singh of Sidhwan Khurd and his daughter, Padamshri Harparkash Kaur, deserve special mention for their outstanding efforts in the field of female education in the district. Early in the century when the public opinion was least responsive to the spread of female education, particularly in rural areas, Bhai Narain Singh started in 1909 a girls primary school at his village Sidhwan Khurd. The small institution in course of time grew up into a degree college.

Educational Set-up.—Prior to the re-organisation of the educational set-up in 1963, there were separate agencies for the control of boys and girls' schools in the district. The boy's schools up to the middle standard were controlled by District Inspector of Schools and girl's middle school by District Inspectress of Schools. They were assisted by Assistant District Inspectors/Inspectresses in regard to the control of the primary schools. The high and higher secondary schools for boys and girls were controlled by the Divisional Inspector and Divisional Inspectress of Schools, Jullundur, respectiely. With the re-organisation of educational set-up on May 8, 1963, the District Education Officer, Ludhiana, has been made responsible for the administration of all primary, middle, high and higher secondary schools for boys and girls in the district. He is assisted by 3 Deputy Education Officers, one of whom is a women. The District Education Officer generally consults the Deputy Education Officer (Women) in matters relating to the women teachers. He is under the supervisory control of the Circle Education Officer, Jullundur.

The District Education Officer is assisted by 16 Block Education Officers whose areas of operation are normally co-terminus with the development blocks. There may, however, be more than one Block Education Officer in a Block, depending upon the number of primary schools. Thus, there are two Block Education Officers each in Ludhiana, Mangat, Dehlon and Samrala blocks. In addition to the above supervisory staff an Assistant Education Officer (P.T.) assists the District Education Officer in connection with the promotion of physical education in primary and middle schools.

At ministerial level, the establishment, accounts, examination and general (including statistics) branches function under the general supervision of a Superintendent, who is responsible to the District Education Officer for general administration and working of the District Education Office.

Medium of Instruction.—According to the Sachar Formula introduced in the State in 1949, the teaching of Punjabi as the first language and as medium of instruction began from the first class and Hindi as the second language was introduced from the fourth class. There was, however, an option that a parent could declare Hindi as the mother tongue of his child and, if the number of such children came to 10 or more in a class, or 40 or more in a school at the primary

stage, or 1/3rd of the total number of students in the school at the secondary stage, provision for teaching of Hindi as the first language and a s medium of instruction was made for such a group of children.

With the re-organisation of the Punjab from November 1, 1966, the whole of the new Punjab State has become a unilingual Punjabi speaking State. With the passing of the Punjab Official Language Act, 1967, Punjabi has become the official language of the State. It has been introduced in the administration from January 1, 1968 at the district level and from April, 13, 1968, at the State level.

(b) Literacy and Educational Standards

Growth of Literacy.—The 1961 Census revealed that Ludhiana District had a much higher literacy percentage (36.3) than in the then Punjab State (24·2) and the Indian Union (24) as a whole. Among the districts of the re-organised Punjab State, Ludhiana District again occupies first position in regard to literacy pecentage according to the 1961 Census. This high percentage of literacy has been achieved through the Five-Year Plans as is borne out by the following table:—

Progress of School Education in Ludhiana District, 1951-52 to 1960-61

	Schools		Scholars	
	Boys	Girls	Boys	Girls
1951-52—				
Primary Schools ..	262	113	22,782	..
Middle Schools ..	32	13	7,062	..
High Schools ..	37	7	9,667	..
Total ..	331	133	39,511	..
1960-61—				
Primary Schools ..	553	122	38,221	25,221
Middle Schools ..	51	26	9,527	8,647
High Schools ..	65	27	27,838	15,919
Higher Secondary Schools ..	9	4	15,290	3,058
Total ..	678	179	90,876	52,845

(*Ludhiana District Census Handbook* 1961, p. 37)

The School going boys, past 5 years and below 15 years in age, formed 60 per cent of the male population, though the girl students were only 40 per cent in this age group.

The people in general are becoming education-minded and there is a general demand for more and more schools, especially in the villages. The parents seem to be eager that their children should be given proper facilities

for education. There is an equally strong urge for education of women and the number of women students shows an upward trend.

As expected in the new national set-up, the responsibility for providing education for the citizens has mainly been assumed by the Government, though missions and philanthropic endowments, as mentioned below, are also rendering valuable service in this field. Their contribution still continues to be noteworthy.

(i) **Christian Missions.**—The Christian Missionaries have done pioneering work in the sphere of education in the district. The Ludhiana Mission of the Presbyterian Church of the United States of America started its High School for boys at Ludhiana as early as 1834 and transferred its Christian boys Boarding High School from Lahore to Ludhiana in 1877. The Ludhiana Zenana and Medical Mission initially set up in 1867 a Christian Girls Boarding School and subsequently converted it in to the Christian Medical School for Women. The institution along with its attached hospital has acquired an enviable reputation under the able guidance of Miss Brown. The School has been raised to degree standard since 1953.

(ii) **Khalsa Dewan, Ludhiana.**—It was set up in 1907 with a view to establishing and maintaining educational institutions and boarding houses. In 1966 the Dewan was running the following four institutions:—

(1) Malwa Central College of Education, Ludhiana;
(2) Khalsa College for Women, Ludhiana;
(3) Malwa Khalsa Higher Secondary School, Ludhiana and
(4) Khalsa Girls' Higher Secondary School, Ludhiana.

(iii) **Nankana Sahib Education Trust, Ludhiana.**—Registered on February 24, 1953, it aims at providing facilities to the poor, backward and other deserving students in engineering and scientific education and in making special arrangements for the preparation of competitive examinations and tests for recruitment to the various services and also for admission to the various professional colleges, schools and institutions in India. In 1966, it was running Guru Nanak Engineering College, Ludhiana.

(iv) **Shri Guru Har Gobind Ujjagar Hari Trust, Sidhwan Khurd.**—It was established in 1934 by Bhai Sahib Bhai Narain Singh of Sidhwan Khurd to run the Khalsa High School for Girls, Sidhwan Khurd, which he had founded. In 1966, the Trust was running the following three institutions, all of which are affiliated to the Punjab University, Chandigarh:—

(1) G. H. G. Harparkash College of Education for Women, Sidhwan Khurd;
(2) Khalsa College for Women, Sidhwan Khurd, and
(3) Sikh Girls's Higher Secondary School, Sidhwan Khurd.

(vi) **The Ajitsar Education Committee, Mohi (Ludhiana).**—After shifting from the West Pakistan on the partition of the Punjab, this society

started functioning in 1948 in village Mohi, tahsil Jagraon. It was then named as the Executive Committee, Khalsa High School, Ajitsar, Mohi (Ludhiana), which got the approval of the State Education Department on November 25, 1950. In 1966, its name was changed to the Ajitsar Education Committee, Mohi, which was registered on August 21, 1966.

The object of the Committee is the establishment, maintenance and promotion of educational institutions. In 1966, it was running the following four institutions.[6] :—

(1) Camp Khalsa High School, Ajitsar, Mohi (Ludhiana). (opened in 1948)

(2) Ajitsar Khalsa High School, Jangpur (Ludhiana). (Opened in 1949)

(3) Ajit Public Girls High School, Raikot. (Opened in 1953).

(4) Sri Dasmesh Khalsa High School, Tahliana Saheb, Raikot. (Opened in 1953).

Women's: Education : Prior to the annexation of the Punjab by the British, little attention was paid to the education of women. Only among a few well-to-do families, girls were given rudimentary education in 3 Rs.

The Christian Missionaries were the first in the field of women's education in the district. The Ludhiana Zenana and Medical Mission was started in 1867 by the Society for Promoting Female Education in India and the East, which, at the invitation of the Missionaries of the American Presbyterian Mission, sent Miss Jerrom to carry on Zenana and School work in Ludhiana. The Ludhiana Christian Girl's Boarding School was established in 1871 for the purpose of training Indian Christian Girls as teachers. They were taught the vernacular and a little English, Government text books being used for the most part. In 1882, there were 37 boarders and 29 day scholars, besides 11 little boys, who were afterwards transferred to the American Misson School. Muhammadan and Hindu girls were admitted if willing to conform to the rules of the school; but no separate arrangements were made for them on account of their religion. This school was carried on for many years till financial difficulties compelled it to be closed.

Medical work was begun in 1875 among Zenana and School pupils and became so popular that in 1881 the City Dispensary for Women and Child-

6. Another institution, viz., Ajitsar Khalsa Girls High School, Mushkiana Saheb (Mullanpur, Ludhiana District) was opened in 1968.

ren was opened. It was followed in 1886 by a Branch Dispensary in village Gill and in 1897 by another Branch Dispensary at Phillaur (District Jullundur). The Charlotte Hospital for Women and Children was opend at Ludhiana in February, 1889. On the dissolution of the Society for Promoting Female Education in India and the East in 1899, the sole responsibility of the Ludhiana Zenana and Medical Mission devolved on Miss Greenfield, under whose charge it had functioned since 1879.[7]

Education of Scheduled Castes and Backward Clases.—The Scheduled Castes and Backward Classes, particularly those inhabiting rural areas, are still not enthusiastic about education. The introduction of free compulsory primary education has had a salutary effect on them, and they have been given various other inducements and encouragements. Education is free up to the Middle Standard in all Government and provincialised schools. Free books, stipends and scholarships are awarded to the students belonging to these classes in all institutions including colleges, under the various schemes sponsored by the State and the Union Governments. Remission and refund of examination fees for departmental and university examinations are also made.

Books and clothes are given free to the poor students irrespective of caste and creed out of school Red Cross fund upto 50 per cent of the annual income of the fund.

The financial assistance given to the students belonging to the Scheduled Castes and Backward Classes in the district, during the period 1962-63 to 1965-66, is detailed as under :

Year		Stipends	No. of students benefited
1962-63	..	2,10,517	3,389
1963-64	..	1,35,419	2,297
1964-65		1,85,327	2,519
1965-66	..	1,36,562	3,175

(*Source* : District Education Officer, Ludhiana)

7. For further particulars regarding the work of the Ludhiana Zenana and Medical Mission, in Ludhiana District, refer to Miss Greenfield's '*Five Years in Ludhiana*", 1886.

The number of Scheduled Castes and Backward Classes students studying in different institutions in the district, during the year 1965-66, was as under :

Type of institution		No. of Scheduled Castes and Backward Classes students		
		Boys	Girls	Total
Primary Schools	..	13,197	7,241	20,438
Middle Schools	..	3,167	1,370	4,537
High Schools		4,035	1,000	5,035
Higher Secondary Schools	..	1,458	420	1,878
Multipurpose Higher Secondary Schools	..	977	—	977
Basic Training	..	6	10	16
Total	..	22,840	10,041	32,881
Degree Colleges	..	..	..	..
Professional and Technical Colleges	..	..	..	..
Total	..	..	..	..

(*Source* : District Education Officer, Ludhiana and Director, Public Instruction, Punjab, Chandigarh)

(c) General Education

Role of Local Bodies in the Field of Education.—The Zila Parishad (formerly District Board), Ludhiana, and the various municipal committees in the district have done commendable work in the field of education. Elementary education was their exclusive responsibility. Prior to the provincialisation of schools in October, 1957, the number of primary, middle and high schools, maintained by the local bodies in the district was as follows :—

Name of Local Body		No. of Schools maintained before 1957					
		Primary		*Middle*		*High*	
		Boys	Girls	Boys	Girls	Boys	Girls
Zila Parishad, Ludhiana	..	545	93	28	20	20	3
Municipal Committee, Ludhiana	..	11	10	4	1	—	2
Municipal Committee, Jagraon	..	3	3	—	—	—	1
Municipal Committee, Samrala	..	—	—	—	—	—	1
Municipal Committee, Khanna	..	5	1	—	—	—	—
Municipal Committee, Raikot	..	—	—	—	—	—	1
Total	..	564	107	32	21	20	8

(*Source* : District Education Officer, Ludhiana)

On the provincialisation of these schools, the local bodies were required to pay annually, specified subsidy towards maintenance. The contribution, thus, made by them from 1957-58 to 1965-66 is shown in the following table :—

Amount of Contribution Made by the Local Bodies towards the Maintenance of Provincialised Schools in Ludhiana District during 1957-58 to 1965-66

Name of Local Body	Year								
	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
Zila Parishad, Ludhiana ..	76,181	4,20,028	3,12,782	3,12,782	3,12,782	—	—	—	—
Municipal Committee, Laudhiana ..	2,84,350	3,68,252	3,09,382	3,22,087	2,50,000	—	—	—	—
Municipal Committee, Jagraon ..	20,716	70,800	91,944	91,944	91,944	—	—	—	—
Municipal Committee, Samrala ..	2,617	6,280	6,280	—	6,280	—	—	—	—
Municipal Committee, Khanna ..	22,161	45,000	—	—	—	—	—	—	—
Municipal Committee, Raikot ..	1,939	13,491	13,491	13,491	13,491	13,491	—	—	—
Total ..	4,07,964	9,23,851	7,33,879	7,40,304	6,74,497	13, 491	—	—	—

(*Source* : District Education Officer, Ludhiana)

Pre-primary Schools.—Pre-primary or nursery education is highly desirable for the physical, emotional and intellectual development of children between the ages of three and six. The aim is the creation of a healthy social environment wherein the child may develop his physique and intellect. Co-operation and not competition is emphasised. Spontaneous activities lead to the emotional development. A love for work is developed and the child begins to find work in play and play in work. The main aim of education at this stage is to give young children social experience rather than formal instruction.

Pre-primary education in the district is not organised or given any special impetus. Yet it has gained a tempo and the public is becoming conscious of the psychological needs of the children. Some voluntary organisations and individuals have, thus, started private schools to meet the requirements of the small children.

Primary and Basic Schools.—Compulsory primary education was introduced in the State during the Third Five-Year Plan --starting with the age group 6-7 in 1961-62, extended to 7-8 in 1962-63, 8-9 in 1963-64, 9-10 in 1964-65 and 10-11 in 1965-66. Almost every village, with a population of 500 or more in the district, has now got a primary school. There were 675 primary schools in the district in 1965-66 as compared to 612 in 1964-65. Out of the total number of 675 primary schools, there were 43 Multi-Teacher Basic Primary Schools and 632 Multi-Teacher Primary Schools. In 1965-66, the number of students on roll in all types of primary schools in the district was 1,08,351 and the number of teachers was 2,435. The details of educational instituions and scholars are given in the following table :—

सत्यमेव जयते

Educational Institutions and Scholars at Primary Stage in Ludhiana District as on March 31, 1966

Schools	No. of institutions							No. of Scholars		
	Government		*Private*		*Total*					
	Boys	Girls	Boys	Girls	Boys	Girls	Total	Boys	Girls	Total
Primary Schools ..	601	25	5	1	606	26	632	56,719	41,288	98,007
Basic Primary Schools ..	36	7	—	—	36	7	43	5,469	4,875	10,344

(*Source* : District Education Officer, Ludhiana)

In 1965-66, there were 80 single teacher schools in the district. In other schools, teachers are provided at the pupil-teacher ratio of 50:1.

In primary schools and in primary departments of middle/high/higher secondary schools, teachers are entrusted with the work of teaching the classes as a whole in all subjects. The number of students in a section of a primary school is around 50. Should the number of students in a class be small, two or more classes are combined and given over to one teacher, i.e. upto the primary stage the class system is prevalent. All the primary schools have five classes.

Most of the primary school teachers are either basic trained or have been oriented to the basic pattern. Under the new system of education, primary schools are being converted into five-grade basic schools. In 1965-66, there were 43 Junior Basic Primary Schools and 6 Senior Basic Schools in the district. With the introduction of basic education and change in the teachers training institutions from J.T. to J.B.T., new methods of teaching are being introduced in the primary schools.

The Government Basic Training School, Jagraon, functioning under the control of the District Education Officer, Ludhiana, has 50 primary schools attached to its Extension Service Department. This department is rendering useful service to the cause of education by holding seminars for teachers on improving the handwriting of the children through standardised means.

In 1965-66, the total expenditure on primary schools in the district was Rs. 41,45,350.

Secondary Schools.—At the secondary stage, there were on March 31, 1966, 33 higher secondary schools (including 3 multipurpose), 91 high schools and 89 middle schools in the district, with total number of scholars for each category as 37,344, 41,897 and 30,722, respectively, as per details given in the following table :—

Educational Institutions and Scholars at Secondary Stage in Ludhiana District as on March 31, 1966

Schools	No. of institutions						No. of Schoalrs		
	Government		*Private*		*Total*				
	Boys	Girls	Boys	Girls	Boys	Girls	Total	Boys	Girls	Total
Higher Secondary Schools ..	7	3	14	9	21	12	33	24,273	13,071	37,344
High Schools ..	42	13	28	8	70	21	91	25,432	16,465	41,897
Middle Schools ..	62	22	3	2	65	24	89	16,309	14,413	30,722

(*Source* : District Education Officer, Ludhiana)

सत्यमेव जयते

To introduce diversification of courses after the middle standard, 33 schools in Ludhiana district were converted into higher secondary schools till March, 1966.

The total number of teachers in all the higher secondary, high and middle schools in the district was 3,546 on March 31, 1966. Unlike primary classes, subject teacher system is prevalent in middle, high and higher secondary classes. The teacher qualified to teach a particular subject takes different classes in that very subject.

Generally there are about 50 students in a class and, as soon as the number goes up, it is split up into sections, subject to the availability of the staff.

Education upto the middle standard is free in all the Government schools. Only half fee is charged in case of girls in the 9th and 10th classes.

High and higher secondary school students are awarded scholarships on the basis of merit. The middle school examination is held annually in the month of February and March in which 10 percent brilliant students are awarded scholarships. Fifth class students are also allowed to participate in the scholarship examination held every year.

The total expenditure incurred on middle, high and higher secondary schools in the district in 1965-66 was Rs 79,80,268.

Higher Education.—Ludhiana is the most advanced district in the State in the filed of education. This may be to a large extent due to the fact that after advent of the British in this part of region in 1809, Ludhiana formed the headquarters of the Political Agency and the North West Frontier Agency. The Christian missionaries, who established their institutions at the station in the wake of the British occupation, opened an English teaching school at Ludhiana as early as 1834. Their example indirectly created an interest among the local people for the promotion of education. Thus, a good number of schools, both Government and private, were opened in the district from time to time. An Intermediate Government College was established at Ludhiana in 1920. Thereafter several other institutions of higher education were established from time to time. Those working in 1966 are mentioned below :

1. Government College, Ludhiana ;
2. Government College for Women, Ludhiana ;
3. Arya College, Ludhiana ;
4. A.S. College, Khanna ;
5. G.H.G. Khalsa College, Gurusar Sadhar (Ludhiana) ;

6. Gujranwala Guru Nanak Khalsa College, Ludhiana ;
7. Khalsa College for Women, Ludhiana ;
8. Khalsa College for Women, Sidhwan Khurd (Ludhiana) ;
9. Lajpat Rai Memorial College, Jagraon ;
10. Sanmati Government Science College of Education, Jagraon ; and
11. Shri Saraswati Sanskrit College, Khanna.

All the above colleges are affiliated to the Punjab University, Chandigarh.

Government College, Ludhiana.—Started in 1920 at Ludhiana in barracks (now disappeared) on the Ludhiana Ferozepore Road, the college was shifted in 1922 to another building near the Ferozepore Road Railway over-bridge. The college was moved to its present site on the College Road in the Civil Lines, in 1927. Besides F.A. and F.Sc., it ran a Commerce class. It was raised to a Degree College in 1932. It runs Pre-University (Humanities and Science Groups), Pre-Medical and Pre-Engineering classes, and Three Year Degree Course[8] in B.A. and B.Sc. (Medical and Non-Medical). Post-graduate courses in M.A.-English, Mathematics, Geography, Economics, Hindi and Punjabi, have also been introduced since 1951. One year course in German language for the award of Certificate in German has also been introduced since 1966. The college had 1,687 students on rolls in 1965-66 and 2,003 in 1966-67.

Government College for Women, Ludhiana .—Started as an Intermediate College in May, 1943, it was raised to a Degree College in 1944. It was moved to its present building in 1953. It runs Pre-University (Humanities and Science groups), Pre-Medical and Pre-Engineering Classes, and Three Year Degree Course in B.A. and B.Sc. (Medical and Non-Medical). It had 1,129 students on its rolls in 1965-66 and 1,025 students in 1966-67.

Arya College, Ludhiana.—Started in June, 1946, by the Local Arya Samaj, Saban Bazar, the college is run by the Arya Pratinidhi Sabha, Punjab, Jullundur. To begin with it was housed in rented building, known as the " Malerkotla House" in the Civil Lines. The college was shifted to its present building opposite the Police Lines in 1958. It runs Pre-University (Humanties and Science Groups), Pre-Medical and Pre-Engineering Classes, and Three Year Degree Course in B.A. and B.Sc. (Non-Medical). It had 874 students on its rolls in 1965-66 and 932 students in 1966-67.

8. B.A. and B.Sc. were switched over to Three Year Degree Course from July, 1961.

A.S. College, Khanna.—It was started in June, 1946, by the Anglo Sanskrit High School Khanna Trust and Management Society. It was housed in one of the wings of the A.S. High School, Khanna, till October, 1950, when it was shifted to its own building at a distance of 3·22 kilometres from Khanna on the Khanna-Samrala road.

Though started as an Arts College, Intermediate Science (Non-Medical) classes were started in May, 1954 and the Three Year Degree Course, both in Arts and Science subjects, was introduced from July, 1961. The college runs Pre-University (Humanities and Science Groups) and Pre-Engineering classes, and Three Year Degree Course in B.A. and B.Sc. (Non-Medical). It had 568 students on rolls in 1965-66 and 737 students in 1966-67.

G.H.G. Khalsa College, Gurusar Sadhar (Ludhiana).—It was started in April, 1948 by the Governing Council of the College. During the first twelve years, the classes were run in the building of G.H.G. Khalsa High School, Gurusar Sadhar (Ludhiana), constructed at the historic place where Guru Hargovind is said to have stayed for about six months during the reign of Emperor Jahangir. It imparted education up to the F.Sc. standard in Science and up to the Degree standard in Arts.

In 1960, the college moved into its own newly constructed building situated on the Ludhiana -Raikot Road and, since then, it runs Pre-University (Humanities and Science Groups), Pre-Medical and Pre-Engineering classes and Three Year Degree Course in B.A. and B.Sc. (Non-Medical). It is a co-educational institution. It had 572 students on its rolls in 1965-66 and 698 in 1966-67.

Gujranwala Guru Nanak Khalsa College, Ludhiana.—Originally it was started at Gujranwala (West Pakistan) in May, 1917. In 1921, under the impact of the national movement launched by Mahatma Gandhi for boycotting British goods and British culture and education, it became a ' National College' and ceased to be affiliated to the Punjab University, Lahore. It was, however, re-affiliated to the University in May, 1923 and continued its even tenor of life up to the time of Punjab partition when the number of students on rolls was 750. It had been affiliated to the Punjab University for all important Arts and Science subjects upto the Degree standard.

The institution was revived in Ludhiana in May, 1953 by the Khalsa Educational Council (Gujranwala), Ludhiana, and was affiliated to the Punjab University, Chandigarh. It runs Pre-University (Humanities and Science Groups) and Pre-Engineerng classes, and Three Year Degree Course in B.A. and B.Sc. (Non-Medical). It had 650 students on its rolls in 1965-66 and 851 in 1966-67.

Khalsa College for Women, Ludhiana.—It was established in 1958 in the Civil Lines, by the Khalsa Dewan, Ludhiana, an educational society set up in 1907. It runs Pre-University (Humanities and Science Groups), Pre-Medical and Pre-Engineering Classes, and Three Year Degree Course in B.A. and B.Sc. (Medical). It had 940 students on rolls in 1965-66 and 1,293 in 1966-67.

Khalsa College for Women, Sidhwan Khurd (Ludhiana).—Run by Sri Guru Har Gobind Ujagar Hari Trust, Sidhwan Khurd, this college was founded in June, 1950 by Padam Shri Bibi Harparkash Kaur[9], in the memory of her father, Bhai Narain Singh of Sidhwan Khurd, who died in 1944. It was affiliated to the Panjab University, Chandigarh, in 1951.

The college runs Pre-University (Humanities Group) and Three Year Degree Course in B.A. It had 294 students in its rolls in 1965-66 and 337 in 1966-67.

Lajpat Rai Memorial College, Jagraon .—It was started in July, 1959 in the memory of Lala Lajpat Rai by the Radha Krishan Trust, Jagraon, which was founded by Lala Lajpat Rai himself at his home-town. It is affiliated to the Panjab University for Pre-University (Humanities and Science Groups), Pre-Engineering course, Three Year Degree Course in B.A. and B.Sc. (Non-Medical) and Honours course in English. It is a co-educational institution with 540 students (including 153 girls) in 1965-66, and 702 students (including 189 girls) in 1966-67. A boy's hostel is also attached to the college.

Sanmati Government Science College of Education, Jagroan.—A new venture sponsored by the Punjab Government in science and research education in the State, the Sanmati Government Science College of Education, Jagraon, was opened on July 18, 1968 by Shri Y.B. Chavan, Union Home Minister. This institute, which has some unique features, is the first of its kind in Northern India. It aims at providing opportunities to the talented youth in the field of education.

The subjects included in the curriculum are Physics, Chemistry, Botany, Zoology, Mathematics and English. The Punjab University, Chandigarh, has granted affiliation to this institution upto B.Sc. Part II for the present ; but the plans are to have post-graduate classes in various science subjects in due course.

In order to relieve the students of all financial worries, the college awards scholarships ranging from Rs. 50 to Rs. 100 per month, depending upon the income of the parents of the students.

Suitable hostel accommodation is also proposed to be provided both for boys and girls. The object is to develop this college as a residential institution.

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9. Padam Shri Bibi Harparkash Kaur died on August 6, 1965.

With a view to placing the latest scientific information, in theory and practice, at the disposal of the students, care has been taken to stock the library with up-to-date books and journals and equip the laboratories with the latest scientific apparatus and appliances.

In addition to 16 acres of land donated by Jain Muni Bimal Chander, the Government has acquired 23 acres of land for the institution.

Shri Saraswati Sanskrit College, Khanna.—Started in the year 1907, the college is the first of its type in the whole of the State. It is purely an oriental college for Sanskrit studies and imparts instructions in Sanskrit from Praveshika to Acharya classes. Besides the facilities of free boarding and lodging and tution given to the students, the college also awards scholarships to the deserving students.

The college is affiliated to Punjab University. It had 69 students on its rolls in 1965-66.

(d) PROFESSIONAL AND TECHNICAL EDUCATION

Teachers Training.—The Teachers' training institutions are pre-requisites for expansion of school education. The following colleges and schools, which prepare students for the teachers' training degrees/diplomas, are functioning in the district :—

Sl. No.	Name of Institution	Degree/ Diploma awarded	Duration
1	Khalsa Basic Training College for Women, Sidhwa, Khurd (Ludhiana)	B.Ed., J.B.T.	1 Year, 2 years
2	Malwa Central College of Education, Ludhiana	B.Ed.	1 year
3	Government Basic Training School, Jagraon ..	J. B. T.	2 years

Besides the above, during 1965-66, 7 J.B.T. units for men and 6 for women were running in the different schools and colleges in the district.

Khalsa Basic Training College for Women, Sidhwan Khurd (Ludhiana)[10].—Situated in rural surroundings at a distance of 29 kilometres from Ludhiana on the Ludhiana-Ferozepore Road, the college is run by Sri Guru Har Gobind Ujjagar Hari Trust, created in 1934 by Bhai Sahib Bhai Narain Singh of Sidhwan Khurd who donated his entire property for the promotion of education in the district. Started in May, 1909 only as a primary girls school, it was in course

10. In April, 1967, the name of the college was changed as under :

G.H.G. Harparkash College of Education for Women, Sidhwan Khurd (Ludhiana).

of time raised to a middle school and in 1934 became recognised as a high school. Before his death in 1944, Bhai Narain Singh required his illustrious daughter, Padma Shri Bibi Harparkash Kaur (died in 1965), to carry on the educational work started by him. The institution was raised to a Degree College in 1950.

To meet the call of the hour and in keeping with the latest developments in pedagogy, the management started B.T. class in 1954. This class remained attached to the Degree College[11] up to 1954, after which a full-fledged separate Training College started functioning in 1955. It is affiliated to the Punjab University, Chandigarh, and prepares students for the Post-Matric J.B.T. course (for 2 years) and the Post-Graduate B.Ed. course (for 1 year). It had on its rolls 95 J.B.T. and 200 B.Ed. students in 1965-66 and 47 J.B.T. and 200 B.Ed. in 1966-67.

Malwa Central College of Education, Ludhiana.—It was established by the Khalsa Dewan, Ludhiana, in 1955. Though a co-educational[12] institution, all the seats are, in the first instance, offered to women students only. The J.B.T. classes were started in 1964. The college is affiliated to the Panjab University, Chandigarh, and prepares students for the Post-Graduate B.Ed. Course for one year and J.B.T. teachers' course for two years. It had 333 students on its rolls in 1965-66 and 290 students in 1966-67.

Government Basic Training School, Jagraon .—It was established in 1949. It is affiliated to the Panjab University, Chandigarh, and prepares students for J.B.T., which course runs for two years. It had 190 trainees on rolls in 1965-66 and 193 in 1966-67.

The school has an elementary Extension Service Centre for the qualitative improvement of 50 attached schools. With standardised teaching aids, this Extension Service Department has re-organised the teaching in the attached schools.

Medical Education.—The modern medical education was started in the district by the Christian Missionaries who settled here on the advent of British authority in this part of the region in the beginning of the 19th century.

Christian Medical College, Ludhiana.—It was founded in 1894 by Dr. Miss Edith Mary Brown, an English woman, who realised the need of training doctors who could minister to the needs of the women in India. Known in the beginning as the Punjab Medical School for Women, the college was recognised by Government in 1915 under the name :' The Women's Christian Medical College'. From the foundation of the college until its upgrading to a Degree College for the M.B.B.S. course in 1953, 743 students qualified for the L.S.M.F. and L.M.S. diplomas.

11. Khalsa College for Women, Sidhwan Khurd (Ludhiana).

12. Now, only girl students are admitted in the college.

In 1953, the college began to admit men and women students for the M.B.B.S. Degree course. Since then 50 M.B.B.S. students—25 men and 25 women, are admitted every year. There were 301 students on the roll of the college in 1965-66 and 300 in 1966-67.

The college was affiliated to the Panjab University, Chandigarh, in 1959. It is run by the Christian Medical College Society, Ludhiana.

Facilities for post-graduate work are available in the following departments of the college and the attached hospital :—

Anaesthesia	..	M.S. and D.A.
Medicine	..	M.D.
Obstetrics and Gynaecology	..	M.D. and D.G.O.
Ophthalmology	..	M.S. and D.O.M.S.
Paediatrics	..	M.D. and D.C.H.
Pathology	..	M.D.
Physiology	..	M.D.
Surgery	..	M.S.
Orthopaedic Surgey	..	M.S.

The following training courses are also run in the institution :—

(i) Course of instruction for laboratory technicians who have previous medical laboratory experience, leading to the P.S.M.F. Diploma. The course begins in November each year.

(ii) The Department of Radiology is recognised by the Society of Radiographers in Britian as training and examining centre in radiography. The course is for one year.

(iii) The Department of Physiotherapy has started a School of Phsiotherapy, a two year course for which a diploma is given.

(iv) General Nursing Course for three years and midwifery course for one year.

(v) Training course for Health Visitors, for two and a half years, is given in the Health School.

In the initial stage, the college and the hospital were run largely by funds received from Great Britain and Ireland. Subsequently, the Christian Church

throughout the world, especially in the U.S.A. and the Commonwealth countries as well as in Germany, Holland and Switzerland, has co-operated in the development of the medical facilities by contributing not only funds but also personnel. Thus the faculty and staff may be said to have been organised on an international basis. The Central and State Governments have also contributed towards the capital expenditure incurred in the development of the college and the building of the new hospital, although, as in the past, the greater measure of financial assistance still comes from foreign countries.

Dayanand Medical College, Ludhiana.—The Arya Medical College, Ludhiana, was originally started under the name of Ludhiana Medical School in 1934 by Dr. Banarsi Dass Soni, Ex-Capt., I.M.S., in collaboration with some local doctors, with the object of preparing students for L.S.M.F. Diploma of the Punjab State Medical Faculty. It was recognised by the Punjab Medical Council in 1935 for 1st Prof. L.S.M.F. In the beginning, the admission was limited to 20 students, but in 1951 the school was permitted to admit 35 students out of which 5 were nominated by the Punjab Government. The students admitted had to execute a bond to serve the Punjab Government in rural areas for at least 3 years after successful completion of studies. Started in a rented building in the Civil Lines to begin with, the Medical School was shifted to its own building at the present site in 1937.

After the death of the founder in 1935, the management, faced with financial difficulties, handed over the institution to the Arya Samaj, Saban Bazar, Ludhiana in 1937. Since then a separate Managing Body nominated by the Managing Committee of Arya Higher Secondary School, Ludhiana, has been running the Arya Medical School and the attached Dayanand Hospital.

In 1953, the institution was recommended by the Bhore Committee for its upgrading to M.B., B.S. standard, provided it was given adequate grant, recurring and non-recurring, by the State Government. Thus, under instructions from the Punjab Government, L.S.M.F. course was discontinued in 1963. The school was upgraded to M.B.B.S. Degree College in 1964 and named as Dayanand Medical College and affiliated to the Panjab University, Chandigarh. The course is of five years duration. The admission is limited to 50 including 10 to 15 girls. A new managing society was formed under the name of Dayanand Medical College and Hospital Managing Society.

Punjab Agricultural University, Ludhiana.—The University was established in December, 1962, under the Punjab Agricultural University Act, 1961, passed in October, 1961. To begin with the College of Agriculture, Ludhiana, and the College of Veterinary and Animal Science, Hissar, (now in Haryana), formed the constitutent colleges of the University.

The campus of the University has since developed further. In 1966-67, there were seven constituent colleges of the University : College of Agriculture, Ludhiana ; College of Agriculture, Hissar ; College of Veterinary and Animal Science, Hissar ; College of Agricultural Engineering, Ludhiana ; College of Basic Sciences and Humanities with some Departments at Ludhiana and some at Hissar ; College of Home Science, Ludhiana, and Junior College of Agriculture, Palampur (Himachal Pradesh). All the colleges of this University are constituent colleges and form an integral part of the University organisation.

College of Agriculture, Ludhiana.—It may be said to have its beginning in the Punjab Agricultural College and Research Institute, established in 1909 at Lyallpur, which is now in West Pakistan. The college having gone over to Pakistan, its Indian counterpart was started at Amritsar[13] in November, 1947, with such of the (non-Muslim) staff as had migrated to India serving as a nucleus. In 1949, it moved to a rented building[14] at Ludhiana, and in 1959 it shifted to its present building[15] on the Ludhiana-Ferozepore Road, about 5 kilometres from the Railway Station, Ludhiana.

The college is essentially residential. It admits students to the following programmes :—

(1) B.Sc. Agriculture (5-year programme).

(2) B.Sc. Agriculture (4-year programme).

(3) M.Sc. Programme
(4) Ph.D. Programme
} Chemistry-Biochemistry, Agricultural Economics and Rural Sociology. Extension Education, Horticulture (Pomology and Olericulture), Plant Breeding, Statistics, and Zoology-Entomology.

The college had 983 students on rolls in 1965-66 and 1,182 in 1966-67.

College of Agricultural Engineering, Ludhiana.—Agricultural Engineering in a broad sense included such phases and features of the Science and practice of engineering as are integrated with and closely related to agriculture. The

[13]. The Khalsa College, Amritsar, agreed to be the host and classes were re-started in its building in November, 1947.

[14]. In June, 1949, the building of Malwa Khalsa Higher School, Ludhiana, was rented and the Government Agricultural College was shifted there from Amritsar.

[15]. The foundation stone of the building of the Government Agricultural College and Research Institute, Ludhiana, was laid on September 23, 1955, by Shri Ajit Prasad Jain, the then Union Minister for Food and Agriculture. On the completion of the ground floor of the building, the teaching and research activities were shifted there in September, 1958. The main building was, however, completed in 1960. The construction of an additional building for post-graduate research and teaching was started in 1960 and completed in 1963.

college started functioning from July, 1965. It offers a five-year programme leading to the B.Sc. Agricultural Engineering Degree. The college had 138 students on rolls in 1965-66 and 244 in 1966-67.

College of Basic Sciences and Humanities, Ludhiana.—With some departments at Ludhiana and others at Hissar, the college started functioning from October 1, 1965. It offers a Training Programme in Research Methods in Agricultural Economics and Rural Sociology of one year's duration. This course is primarily meant for persons engaged in Agricultural Economics and Rural Sociology research, to equip them with the latest research techniques and analytical tools which can be brought to bear on research problems. The college had 25 students on rolls in 1966-67.

College of Home Science, Ludhiana.—To meet the pressing demand of the people of the State, the Punjab Agricultural University, established this college in July, 1966. For the time being, it is housed within the building of the College of Agriculture, Ludhiana. Twenty-five students were enrolled in 1966-67 for the regular four-year B.Sc. course.

The curriculum for the students for the B.Sc. degree course includes courses on Basic Science, Humanities. Applied Arts, Fine Arts, Horticulture, Dairying, Poultry and the five disciplines of Home Science.

Technical Education.—With the advancement in the field of science and technology, the general education is required to have a distinct technical and scientific bias. The district has the following institutions in the field of engineering and technology :—

1. Guru Nanak Engineering College, Ludhiana, and
2. Government Institute of Textile Chemistry and Knitting Technology, Ludhiana.

Guru Nanak Engineering College, Ludhiana.—It was established by the Nankana Sahib Education Trust on October 19, 1953, when admission to only Diploma courses was thrown open. Admission to the Degree courses was also started from 1956. Further expansion was made in 1963, when admission to both the Diploma and Degree courses was increased from 120 to 180.

The college offers the following courses of study :—

I. College Courses

Engineering Degree Courses in Civil, Mechanical and Electrical Engineering of four years duration leading to the award of B.Sc. (Engineering) Degree of the Panjab University.

II. Polytechnic Courses

(1) State Board Diploma Courses in Civil, Mechanical and Electrical Engineering of three years duration leading to the award of Diploma of Punjab State Board for Technical Education, Punjab ;

(2) Sandwich Diploma Course in Mechanical Engineering of four years duration leading to the award of Punjab State Board Diploma.

(3) Part-time Diploma Course in Mechanical Engineering of four years duration leading to the award of Punjab State Board Diploma, and

(4) Post Diploma Course in Automobile Engineering of one year duration.

The number of students on rolls of the college was 642 for Degree courses and 593 for Diploma courses in 1965-66 and 688 for Degree courses and 664 for Diploma courses in 1966-67.

Government Institute of Textile Chemistry and Knitting Technology, Lndhiana.—Situated in the premises of the historic fort at Ludhiana, it was previously known as the Government Institute of Dyeing, Printing and Hosiery Technology, Ludhiana[16], which was constituted in 1961, by amalgamating the two old institutions located in the same premises, viz., Government Hosiery Institute, Ludhiana (initially started in 1926), and Government Institute of Dyeing and Calico Printing, Ludhiana (initially started in 1923 at Shahadara near Lahore, West Pakistan). The institute is run by the Department of Industrial Training, Punjab, and is affiliated to the State Board of Technical Education.

The Diplomas, for the following courses of study offered by this institute, are recognised by the State Board of Technical Education and automatically by the Central Board of Technical Education and all concerned Government Departments in the country :—

(i) Diploma in Textile Chemistry (3 years course).

(ii) Diploma in Knitting Technology (3 years course).

Apart from the above, the following two Certificate Trade Courses are run by the institute according to the syllabi and pattern set up by the Director General of Employment and Training, Government of India :—

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16. On August 1, 1967 the institute was rechristened as Government Institute of Textile Chemistry and Knitting Technology, Ludhiana.

(iii) Certificate Course in Hosiery Manufacturing (1 year course)

(iv) Certificate Course in Dyeing and Calico Printing (1 year course).

There is one other regular course for intensive practical training in Knitting :

(v) Technicians Training Certificate Course in Knitwear Manufacture (Power Driven Machines) (1 year course).

This is the only institution of its kind in the country giving Diploma in Knitting Technology and intensive practical training on all types of modern knitting machines and in textile dyeing, bleaching, finishing, printing and garment dyeing and dry cleaning on semi-commercial and laboratory basis. For these special facilities of training, students from all over India and even from the neighbouring countries seek training in the Institute.

(e) Physical Education.

Physical Education, tournaments and other extra-curricular activities receive due attention in the district. An Assistant Education Officer (P. T.) is incharge of physical education in schools and arranges tournaments, games, sports, etc., in educational institutions. There is a District School Tournament Committee, with District Education Officer as its *ex-officio* Chairman. In high and higher secondary schools, a P.T.I. (Physical Training Instructor) is incharge of physical education, while in middle or primary schools, a few teachers look after this work.

The tournaments held at School level each year are : Zonal High Schools Tournament, District High Schools Tournament, Zonal Middle Schools Tournament and District Middle Schoo's Tournament.

(f) National Fitness Corps, National Cadet Corps and Scouts and Guides

National Fitness Corps.—Launched in 1954 as the National Discipline Scheme, the National Fitness Corps got its present name in 1965 after the National Discipline Scheme had been merged with several other items of the physical education programme and the Auxiliary Cadet Corps[17].

Thus, introduced in 1965, the National Fitness Corps aims at development of physical efficiency, toughness, courage, endurance, discipline, partriotic fervour, appreciation of the democractic values of life and love for the country amongst the students. Essentially a planned programme of national reconstruction to help children grow up into responsible citizens, the National Fitness Corps endeavours to achieve its objective by inculcating in children a sense of discipline, organisation and leadership. This entails a variegated programme

17. Recently, the Union Government has decided to disband the 13 year old programme and to arrange for the placement of instructors in the States. The states have not, however, been reported to have reacted favourably to the suggestion.

for developing physical, mental and emotional capacity. It includes a variety of exercises and activities involving the general development of physique. Various sets of exercises, traditional Indian exercises, yogic exercises, gymnastic movements and other activities have been included and recommended with due consideration to the age levels and sex differences.

This programme is a compulsory curricular activity for all children of the age group 9—16 in middle, high and higher secondary schools. Initially, owing to the paucity of trained teachers, it has been introduced only in high and higher secondary schools. Its strength in the district at the end of March, 1967 was 1,04,289 including 90,670 boys and 13,619 girls.

The Circle Incharge, National Fitness Corps, Ludhiana, is incharge of the working of the scheme in Ludhiana and Ferozepore districts. He is under the Senior Supervisor, National Fitness Corps (Northern Region), Ministry of Education, Government of India, Chandigarh.

National Cadet Corps.—The National Cadet Corps is the biggest and the most significant youth movement in the country. It was started in 1948 with a view to fostering physical fitness and inculcating a spirit of discipline, co-operation, leadership and team work among its members. In its application the N. C. C. is complementary to the academic institutions. The aims of the National Cadet Corps are, to develop character, comradeship, the ideal of service and capacity for leadership in young men and women; to provide service training to youngmen and women so as to stimulate interest in the defence of the country and to build up a reserve of manpower to enable the Armed Forces to expand rapidly in a national emergency.

In Ludhiana district, the first unit of the National Cadet Corps, known as 3 Pb. Bn. N.C.C., Ludhiana, was established in October, 1948 in the Government College for Boys, Ludhiana.

In 1965-66, the N.C.C. Group Headquarters, Ludhiana, had 10 N.C.C. Units under its command and control. The group consisted of 52 Infantry Companies plus 2 platoons of Senior Division N.C.C. Boys and Girls Cadets, 58 Troops of Junior Division Boys and Girls Cadets and 194 A.C.C. Sections.

Some officers and cadets from the district participate in the All-India Advance Leadership Camps of Junior and Senior Divisions Boys (Army Wing).

During the Indo-Pak Conflict of September, 1965, 17 N.C.C. Officers and 462 Cadets, both boys and girls, were employed on civil defence duties of guarding the bridges, traffic points, telephone exchanges and other allied duties at Ludhiana and out-stations.

The training to the cadets is imparted by N.C.C. and A.C.C. Officers who are selected from amongst the teachers. They are, however, assisted by the permanent instructional staff of the army.

The strength of the cadets at the end of March, 1966, was as under :

Division		Strength
A C C (Boys)	..	3,144
A C C (Girls)	..	230
Junior Division N.C.C (Boys)		4,972
Junior Division N.C C. (Girls)		455
Senior Division N.C.C. (Boys)		8,197
Senior Division N.C.C. (Girls)		1,134
Total	..	18,132

Scouts and Guides.—Under the chairmanship of the Deputy Commissioner, the District Bharat Scouts and Guides Association is working for the promotion of the movement. Its strength in the district at the end of March, 1966 was 2,184 comprising 1,280 scouts and 904 guides.

For this purpose, the district is divided into 15 zones [18], each under the charge of a Local Headmaster or Principal.

The activities comprise training camps, refresher courses, week-end camps, tahsil camps, district camps, divisional camps, site seeing, hiking trips, etc.

(g) Sports.—Government have taken steps to popularise sports activities in the district, both among men and women.

A District Sports Officer was appointed at Ludhiana in May, 1962. Sports Associations have been formed in all the ten blocks of the district to popularise sports and youth programme activities in rural areas. Grants have been given to village panchayats in almost all the blocks to lay out village/block level playgrounds for use of village youth for various sports

18. The 15 zones intc which Ludhiana district is divided in respect of Scouts and Guides movement are : Ludhiana, Raikot, Jagraon, Dakha, Doraha, Nasrali, Payal, Khanna, Samrala, Sanghol, Sidhwan Bet, Sahnewal, Lalton Klan, Halwara and Mangat.

activities. Grant on 50 : 50 basis for village level grounds is Rs. 2,500 and for block level it is Rs. 5,000. The deficiency of open spaces is thus being made up so that village sportsmen may also get opportunities to play games. To encourage the promising and budding sportsmen and athletes, a scheme for the grant of annual scholarships has been introduced. Scholarships to the tune of Rs. 20 per mensem, per head, to school students (both sexes) and Rs. 30 per mensem, per head, to college students (both sexes) are awarded.

To improve the standard of games, a scheme for the establishment of regional coaching centres for various games has been started. In Ludhiana district, coaching centres for hockey, atheletics, and basket-ball have been functioning since May, 1963. Almost all the educational institutions in Ludhiana proper and some others from rural areas have been taken up for coaching, and training, according to the latest techniques of the different games, is being imparted daily so that the trainees should improve their standards.

The Coaches of various games, posted at Ludhiana, visit different institutions for two hours daily in the morning and impart instructions about the fundamentals to the students having special aptitude for different games. The physical education staff of the respective institutions follow up the programme and thus raise their standard by daily practice.

The Coaches also attend to rural coaching for a week in a month. Village Youth Clubs have been formed in about a score of villages and the important villages in the district will also be covered gradually. Government have introduced a scheme to extend grants to all the Village Youth Clubs for purchase of sports material and paying honorarium to the leaders of the clubs who will be directly responsible for the maintenance of record and smooth running of the coaching centres.

Block Level tournaments are conducted every month so that village youths may also take part in the competitions held by the block sports associations. Regular coaching camps are also organised. To improve the standard of rural players, panchayat Tournaments at the block level, and district level and State level are held every year.

League and knock out competitions are arranged by the Sports Department both for (junior and senior) boys and girls for creating healthy atmosphere, tracing out talent and selection of teams for giving advance training and preparing them for the State and national level competitions.

The District Sports Officer also visits various schools to see that the physical education staff implement the coaching schedules prepared in consultati on with the District Sports Officer.

Arrangements have also been made to popularise sports among women. A District Sports Officer (W) was appointed in August, 1965. Competitions at the school/college level, district level, University level and inter-University level are organised from time to time. Besides, tournaments are held by the Education Department and the District Sports Association.

Regional coaching centres have been started for women where training is imparted daily in hockey, basket-ball and athletics. Coaching camps for a fortnight or two are organised in rural areas where selected girls are given training.

Women Youth Clubs have been formed at block level where training is given. Competitions are held among these clubs and students and teachers of nearby schools take part in them. Tournaments are organised at Block, district and State levels.

(h) Cultural and Literary Societies and Periodicals

Among the cultural societies functioning in the district, mention may be made of the following :—

Jot Kala Kendra, Ludhiana.—It was established in 1962 to promote Punjabi culture, create national unity through cultural programmes, publicise development schemes through songs, dramas, etc., and aid the needy poets and men of literary taste.

Among the literary societies, functioning in the district, the following deserve mention :—

Punjabi Sahitya Akademi, Ludhiana.—It is an all-India organisation of Punjabi scholars, literateurs and artists and is devoted to the cause of the development and promotion of Punjabi language, literature and culture. It is a registered body under the Societies Registration Act, 21 of 1860, with its headquarters at Ludhiana. It is associated with the Central Sahitya Akademi Delhi, set up by the Government of India. The main objects of the Akademi are : to train and prepare scholars for research and creative literature ; to establish a Central Library, Research Institute, and Sahitya Sadan ; to undertake the publication of standard books and journals ; and to undertake and encourage translation of standard works from and into other languages.

Since its inception in 1954, the Akademi has published upto July, 1966, 40 outstanding research books and held 9 All-India Punjabi Conferences at Ludhiana, Patiala, Delhi, Amritsar, Chandigarh, Ambala, Jullundur, Bombay and Ludhiana. Besides, the Akademi held more than 50 literary seminars, political symposia and cultural functions. It publishes its own quarterly research journal *Alochana.*

In order to extend the scope of its activities and strengthen its funcnioning, the Akademi set up in 1966 a centre of its own, called 'Punjabi Bhawan', at Ludhiana, on the Ludhiana-Ferozepore Road. Inaugurated on 2nd July, 1966, the Punjabi Bhawan at Ludhiana is a multi-storeyed building and has, among other features, an auditorium with a capacity of 1,000, an open-air theatre, a reference library, a research institute, a writers' home, a writer's gallery, an art gallery, a printing press, etc.

Periodicals.—The cultural and literary periodicals, published in the district are detailed elsewhere.

(i) Libraries

In the Sikh period, Maharaja Ranjit Singh established and maintained a library in the State Toshakhana. Though Maharaja Ranjit Singh was an unlettered man, he was a great patron of learned men and scholars. The Maharajas of Patiala were also great lovers of books and they purchased valuable, rare and illuminated manuscripts and preserved them in the Palace Library.

In the British Period, the Punjab University College was started at Lahore in the year 1882. The Punjab Public Library was established at Lahore in 1884 with the object of providing a library for the use of all classes of the people and a reading-room open to the public free of charge. The library contributed to the intellectual advancement of the country by placing within the reach of the students and scholars such scientific works as would be impossible for them to acquire. After the partition, the Punjab Library Association was also uprooted, but it was rehabilitated early in 1948, in East Punjab and re-organised at Simla. It held its first Provincial Library Conference and Book Festival at Simla in October, 1948. Similar library conferences and Book Festivals were also held at other places in the State. These activities of the Punjab Library Association paved the way for a planned and co-ordinated development of libraries and improvement of library service in the State.

With a view to co-ordinating and rationalising the existing library facilities and to providing more facilities for the proper functioning of libraries and reading rooms run by various departments of Government and local bodies, the Punjab Government in the year 1950 set up a Central Body designated as the "Central Library Committee" in which the Punjab Library Association is also represented by its President. The Committee did excellent work in implementing the plan, known as Randhawa Plan, which envisaged setting up of new libraries in beautiful surroundings and furnishing them with well-designed furniture, pictures and paintings concerning Punjab

and its people. Under this scheme, new public libraries were started in urban and rural areas of the State. Punjab State has not lagged behind other States in India in the development of academic and special libraries. There is a net work of libraries functioning both in urban and rural areas of the State, which are rendering useful service to the public.

The following libraries are functioning in the district :—

Panchayat Libraries.—Generally every panchayat in the district maintains a small library for the promotion of education in rural areas.

Municipal Libraries.—All the municipalities in the district, viz., Ludhiana, Doraha, Jagraon, Raikot, Samrala and Khanna maintain libraries and reading rooms for public use.

Municipal Public Library, Ludhiana.

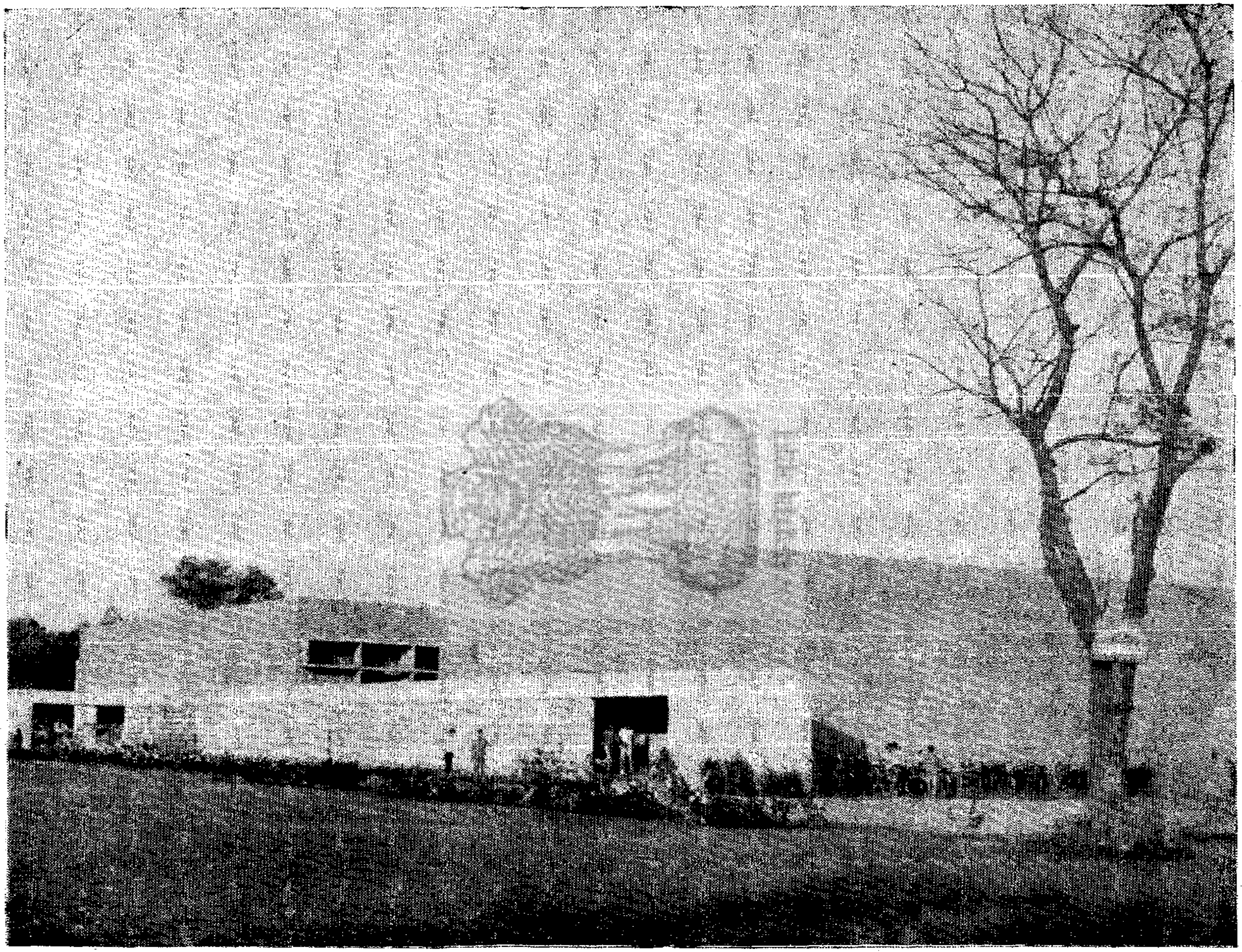
Located on the top floor of the municipal office building, the Municipal Public Library, Ludhiana, was founded in 1878 by G.E. Wakefield, the then Deputy Commissioner and President, Municipal Committee, Ludhiana. It contains 9,197 books on all subjects and subscribes to 28 dailies, 30 weeklies and 9 monthly magazines. The library also runs 18 part-time reading rooms in different parts of the city, each of which is provided with 23 dailies and 31 periodicals for the readers.

The Library remains open for seven hours a day. A resident of Ludhiana can become a member on payment of Rs. 3 as annual subscription and Rs. 10 as security for drawal of books. A person can become a life-member of the Library on payment of Rs. 50 in lumpsum or on donation of books of the same value.

Private Libraries.—Shri Atma Ram Jain, Library, Ludhiana, is the only private public library in the district. Besides, most of the religious bodies in the district maintain their own libraries/reading rooms which contain literature mostly relating to their particular sects.

College and School Libraries.—All the high/higher secondary schools and colleges in the district have their own libraries meant for the use of their students and teachers.

Punjab Agricultural University Library, Ludhiana.—The Punjab Agricultural University Library system comprises three libraries located at different campuses of the University ; Ludhiana, Hissar (in Haryana) and Palampur (in Himachal Pradesh). Close co-operation among the three campuses of the University is maintained and books and journals are freely loaned from one campus of the University to another. Any teacher or post-



Punjab University Extension Library, Ludhiana

graduate student is automatically a member of all campus libraries and can borrow any book from any campus he chooses. Books are also loaned to other co-operating libraries all over India.

Two publications, viz., *Monthly Book Sampler* and *Received This Week*, are being issued simultaneously at Ludhiana and Hissar, as part of their "current awareness service". A consolidated list of dissertations has also been published at Ludhiana.

The Ludhiana Campus Library is the most developed but it is faced with extreme shortage of space. It has therefore, been spread over three campus buildings : one in the College of Agriculture Building, one in College of Agricultural Engineering Building, and one in Post-graduate Wing.

The library has also acquired sophisticated equipment for documentation and microfilming (being one of the first libraries in India to do so).

Punjab University Extension Library, Ludhiana.—At the initiative of the University Grants Commission, Punjab University, Chandigarh, and the India Wheat Loan Educational Exchange Programme of the U.S. Embassy, an Extension Library was established at Ludhiana in July, 1960. Initially housed in Zila Parishad building in the District Courts, it shifted on October 12, 1967, to its own newly constructed building, with a capacity of 200 readers and stock capacity of 1,50,000 books. It has an auditorium with a seating capacity of 250, where cultural, social and instructional programmes are arranged.

In 1966-67, the library had 42,000 books, subscribed to 225 magazines and newspapers, and had a membership of about 3,000. Reading machines for microforms such as Microfilm Reader and Microcard Reader are available to facilitate consultation of research material no longer available in printed form.

The character of this library is unique in India not so much because of its name but because of the types of services it renders. It caters for the requirements of readers right from a freshman to researcher. Another unique feature of the library is that it provides service to the local community which brings it into the category of public library.[19]

Besides, the library offers bibliographical services in regard to *Indian News Index*, *Panjab University Doctoral Dissertations*, *Subject Guide to Indian Periodicals in Economics*, *Vishaya Shirshak Suchi* (list of Subject Headinge in Hindi), etc.

19. The Punjab University Extension Library, Ludhiana, caters to the needs of people residing, serving, studying, teaching and working at Ludhiana or within a radius of 60 kilometres.

CHAPTER XVI

MEDICAL AND PUBLIC HEALTH

(a) **Survey of Public Health and Medical Facilities in early times.**— The indigenous system of medicine—known as Ayurveda has been in vogue in the country from very early times. Despite the prevailing superstitions the scientific spirit progressed and the ancient Ayurvedic system became highly developed and produced eminent practitioners like Dhanwantri, Charak, Shushrata and Vagbhat.

Ayurvedic system was fairly advanced in diagnostic methods. All senses were employed for diagnosis. Pulse also played a great role in diagnosis and prognosis and elaborate pulse lore was developed. The classification of disease was quite elaborate.

Therapeutics were based largely on hygiene and diet—both of great importance in ancient civilisation. Pharmacy was highly developed and Ayurveda mentions no less than 760 vegetable drugs in addition to those from animal and mineral products. Hospitals were established in the country long before the Christian era. Greatest accomplishment of Ayurveda was in the field of surgery. Excision, incision, scarification, puncture, probing, extraction, squeezing and sewing were elaborately described by Shushrata. Rhinoplasty (replacement of the nose) was a unique achievement in the Hindu period owing to the practice of cutting the nose as a punishment under the law.

Etiological rotationships of rats in plague and mosquitoes in malaria were also fully recognised.

Rhazes, Habibun-Abbo and Avicena were best known practitioners and teachers in Arabic medicine and their works were followed by most of the Mohammadans all the world over. The muslims were greatly influenced by the Greek system of medicine and for the same reason the method of treatment adopted by the muslims, though similar to the Ayurveda in many ways, came to be known as 'Unani' or Greek system. Sections of the Mohammadans, however, like the Hindus also, believed in superstitions and they attached considerable importance to amulets and charms to ward off the evil effects of certain diseases. Prayers, too, for curing diseases were much relied upon.

During Mohammadan period, the Ayurveda and Unani systems of medicine were generally practised. The Unani system became more popular in the urban areas due to the patronage of the rulers ; but in the rural areas, where a major part of the population resided, Ayurveda continued to be practised.

In the 18th century the Sikhs wielded power in the Punjab and in their time there was some revival of Ayurvedic system ; but simultaneously the influence of Unani system was also discernible. Public health was not considered to be a major problem ; since most of the time was utilised by the rulers in the expansion of their dominions and collection of revenue. Under peaceful conditions and benevolent rulers free medical aid in some form was available in big towns. The people in the rural areas had to fend for themselves as best as possible.

(b) **Vital Statistics :**

General Standard of Health as reflected by Statistics.—The population of the district according to census figures from 1901 onwards would indicate the trend of variation amongst males and females:

Year		Persons	Decade variation	Percentage decade variation	Males	Females
1901	..	6,51,937	..	..	3,56,567	2,95,370
1911	..	5,03,842	—1,48,095	—22·72	2,85,393	2,18,449
1921	..	5,53,200	+49,358	+9·80	3,10,044	2,43,156
1931	..	6,56,660	+1,03,460	+18·70	3,66,683	2,89,977
1941	..	8,01,093	+1,44,433	+22·00	4,37,336	3,63,757
1951	..	8,07,418	+6,325	+0·79	4,37,336	3,70,082
1961	..	10,22,519	+2,15,101	+26·64	5,51,304	4,71,215

(*Source* : *Ludhiana District Census Handbook*, 1961 p. 161)

These statistics reveal that there has been steady increase in population. There has not, however, been notable increase in population from 1941 to 1951, the period covering the partition of Punjab for the obvious reason that most of the Muhammadans migrated to West Pakistan and in their place the displaced persons from certain districts of West Pakistan settled in the district. As the land left by Muslims was much less in the district, the number of migrants rehabilitated here could not be more. The exceptional

rise in the population of the district in 1961 is not only due to rapid industrialisation of Ludhiana ; but also to increase in the birth rate and decrease in death rate caused by the improved medical facilities available in the district.

The registration of vital statistics, as elsewhere, is compulsory throughout the district. In rural areas the Chowkidars maintain 'Birth and Death Registers'. Necessary records are also maintained by the municipalities in the urban areas. Besides other advantages the procedure provides a dependable record of the growth of population and it also helps in visualising the scope of measures to be taken to check the mortality rate and also to devise ways and means to effect family planning etc. The Chief Medical Officer compiles this data. Appendix I at page 582 indicates the birth and death rates and infantile mortality rate, etc.

There has been marked increase in the birth rate since 1954. It was highest in 1955. This increase was *interalia* due to comparatively peaceful and easy conditions. During the Third Five-Year Plan period the birth rate was on the decrease due largely to the extensive Family Planning and birth control measures undertaken by the Government. The mortality rate was highest in the years 1946 and 1947. As a result of improved medical facilities in the Third Five-Year Plan mortality rate was reduced appreciably.

Important Causes of Mortality.—The important causes of mortality in the district are fever, dysentry, respiratory diseases and injuries. Appendix II at page 583 gives some of the important causes of deaths.

(c) **Diseases Common in the District :**

(i) **Fevers.**—The largest mortality in the district is due to fevers, such as Typhoid, Malaria and other types of fevers. These are caused by unhealthy living and poor diet. The ailments are chronic and the Medical Department finds it difficult to eradicate them. Ordinary fevers may be successfully checked by sulpha-drugs and anti-biotics. Medical facilities have, however, been made available in the remotest corner in the district. Further to remove the persistent causes of fevers, the Government proposes to clear the slums in big cities and towns. The Improvement Trust, Ludhiana, has taken some practical measures in this direction. Better living and balanced diet would ultimately eliminate or at least lessen considerably the general types of fevers.

(ii) **Respiratory Diseases.**—Respiratory Diseases, which are responsible for mortality only next to fevers, are caused by different types of smokes, fumes, vapours of chemical gases, released by the burning of charcoal, coke, etc.—a necessary material required in industry. These gases pollute the

atmosphere all the twenty-four hours and are inhaled by the local population. The smoke is a constant source of irritation and harmful to the respiratory organs. Another factor responsible for aggravating the diseases is the large influx of labour class from the rural areas to Ludhiana in search of employment. Diseases like Tuberculosis find favourable conditions in overcrowded, dark and dingy factories, wherefrom these are carried back in the dwellings of labourers. The slums greatly help in the spread of disease. Working long hours in extremely unhealthy surroundings leads to low resistence which further aggravates the weakness in respiratory mechanism and increases the number of victims.

No check is maintained on the discharge of harmful gases and smokes in the city. Factories Act, 1948, however, lays down that there should be proper disposal of gases in the atmosphere and any harmful wastage should be removed to places where it does not affect the public health.

Proper diagnostic facilities by providing dispensaries/hospitals, provision of institutional facilities, domiciliary treatment and follow-up of cases from diseases like Tuberculosis, Chronic Bronchitis, etc., have brought down the mortality figures to a lower level.

(iii) **Malaria.**—The next common disease is Malaria, which is now practically extinct in the district. This disease used to take heavy toll of thousands of persons in the district in the *Bet* areas. The National Malaria Control Programme followed by National Malaria Eradication Programme reached the stage of surveillance in 1959. The measure has reduced the morbidity and mortality to almost base line. From 1964 N.M.E.P. entered into maintenance phase. It will be of interest to deal with the matter in detail to form a clear picture of the eradication of the disease in the district.

Malaria Control Programme was taken up in the district in 1953. The Malaria Unit, Ferozepore, carried out various anti-malaria operations in the riverain tracts of Ludhiana District. In 1954, a few more units were opened and accordingly the Jullundur Unit was made responsible for carrying out anti-malaria measures in endemic areas of the district. In 1959 the State switched over to National Malaria Eradication Programme. A mypoendemic unit was raised at Ludhiana. This unit was mainly responsible for taking up measures in the way of residual insecticidal spraying in mypoendemic areas of the Ludhiana District, Moga Tahsil of the Ferozepore District and Phillaur Tahsil of the Jullundur District. The unit continued covering these mypoendemic areas while endemic areas of the district remained under the control of the Jullundur Unit. In 1962, on re-organisation, Ludhiana and Jagraon tahsils of Ludhiana District and Moga Tahsil of Ferozepore district were put under the control of the Ludhiana Unit and Samrala Tahsil

under the Chandigarh Unit. Subsequently the entire district was put under the Ludhiana District Unit.

The number of Malaria cases treated in hospitals/dispensaries in the Malaria Unit, Ludhiana, pertaining to the agencies of Ludhiana District is given below :

Year		All cases	Fevers only	Per cent
1959-60	..	1,41,549	3,429	2. 4
1960-61	..	1,54,637	1,922	1·2
1961-62	..	2,82,339	347	0·14

From 1964 the Unit was brought to the maintenance phase.

The statement showing rounds of D.D.T. spray in Malaria Unit, Ludhiana, pertaining to the villages of Ludhiana district are given below :

Year		Number of villages	Population protected	Covered area (in sq. miles)	Houses sprayed	Rooms sprayed	Number of rounds
1959-60	..	275	4,30,147	—	NA	—	1st
1960-61	..	276	4,33,635	—	—	—	1st
1961-62	..	275	5,67,964	481·85	78,972	3,440	1st

Spray operations were withdrawn from 1962-63.

The figures given hereunder indicate stages of malaria cases during surveillance and maintenance phase ;

Year		Number of fever cases detected	Number of blood smears collected	Number of cases given presumptive treatment	Number of blood smears examined	Number of smears found positive	Number of positive cases radically treated
1962	..	83,207	83,307	82,375	—	11	—
1963	..	76,224	75,172	76,055	84,845	4	—

Year		Number of fever cases detected	Number of blood smears collected	Number of cases given pre-sumphile treatment	Number of blood smears examined	Number of smears found positive	Number of positive cases radically treated
1964	..	1,08,408	1,15,281	1,07,483	1,15,281	6	6
1965	..	46,226	47,507	43,549	47,477	2	2
1966	..	70,602	69,103	71,252	67,575	41	41
1967	..	69,633	78,114	64,923	77,843	32	32
1968**	..	85,174	1,03,458	83,386	1,03,121	50	50

**One Block Sidhwan Bet was reverted to attack phase temporarily in 1968 and two rounds of spray were given in the infected area.

(iv) **Dysentry and Diarrhoea.**—Next among the common diseases are dysentry and diarrhoea. These diseases caused by infection adversely reflect on the hygienic conditions of the areas. From 1953 Primary Health Centres, one each in N.E.S. Programme, have become a permanent feature of the medical facilities. Apart from the medical aid provided in these centres services like maternity and child health, environmental sanitation, check of communicable diseases, school health services, vital statistics, health education and family planning are being well looked after particularly in the rural areas. The Medical Department is keen on eliminating epidemics and endemics but ultimately it is the preventive measures in the form of healthy living, protected water-supply and drainage system and change in diet habits that would ensure complete elimination of the infections.

(v) **Communicable Diseases.**—The communicable Diseases—Cholera, Small-pox and Plague, have also not been noted in district since 1948. The general preventive measures, protected water-supply, drainage system and de-rating and preventive inoculations have been some of the significant factors in the elimination of these diseases. Preventive inoculations are also done at *melas*, wherever necessary.

Smoll-pox.—While Cholera and Plague have disappeared from the district, small-pox, despite persistent efforts, has not been completely eradicated. There were 10 cases in 1963. The main reasons for this are that people do not voluntarily get themselves vaccinated after intervals. Unhygienic living in rural and slum-areas is also to a large extent responsible for its incidence. From 1956 the disease was on the decrease except in 1963 when some deaths were registered from small-pox.

Small-pox cases continue to occur during certain seasons every year and the disease appears in epidemic form once in a span of 5-6 years. Keeping in view the gravity of the situation National Small Pox Eradication Programme was launched in 1961-63. Mass campaign was started and the entire population of the district was vaccinated. This colossal work was done under the supervision of a Medical Officer specially appointed for the purpose. Beside medical staff posted in the district, medical personnel posted under the Zila Parishads and the municipalities were also called upon to undertake vaccination work. In the rural areas 1 Superintendent Vaccination, 14 Vaccinators and 5 Assistant vaccination and Rural sanitation vaccinators have been appointed. In Ludhiana City there are 7 vaccination stations with equal number of vaccinators under a Superintendent Vaccination, Ludhiana.

Periodic disinfection of open wells in all the villages of the district is also done by the sanitation staff.

Appendix III at page 584 would show the incidence of small-pox and the details of preventive measures taken in the district.

Plague.—Plague, presently non-existent, was the most feared of all the pestilences. Ever since its spread in 1897 it was never entirely eliminated from the State till 1937. It brought havoc in the district from 1901—04, as mentioned elsewhere. Since partition, like other districts of the State, this pestilence has not been noticed in Ludhiana. This has been achieved by extensive and repeated use of D.D.T. and gammexene in the treatment of rat burrows and flea harbourages in the endemic areas. Utmost vigilance is also maintained in order to detect plague amongst rats or in the human population and every possible precaution is taken to apply preventive measures, including anti-plague inocculation, wherever human cases occur.

Tuberculosis—A Tuberculosis clinic is functioning in Ludhiana since 1954. It is engaged in anti-Tuberculosis work. It was upgraded in 1957 and provided with the necessary equipment. The patients avail themselves of facilities, free of cost, of diagnosis and treatment. The clinics is manned by a Doctor, a Health Visitor, a Laboratory Technician, an X-Ray Technician besides other supporting staff. The work done by the clinic from 1960 onwards in different fields is given hereunder :

Year		Number of persons vaccinated	Number of persons treated
1960	..	2,485	845
1961	..	596	911

Year		Number of persons vaccinated	Number of persons treated
1962	..	—	1,030
1963	..	—	903
1964	..	—	1,135
1965	..	79	991
1966	..	318	1,060
1967	..	246	1,257
1968	..	431	1,429

(*Source* : Chief Medical Officer, Ludhiana)

A team of B.C.G. Vaccinators covers the whole district under the supervision of the Chief Medical Officer, Ludhiana.

(d) **Organisation of Medical and Health Services.—Previously** medical services were divided into two wings—one under the medical services and the other under the health wing. The Civil Surgeon was the incharge of the medical services and was responsible for the functioning of hospitals and dispensaries, medical and surgical work besides being Government medico-legal expert, himself working under the administrative control of the Director Health Services, Punjab. On the other side the District Medical Officer of Health was incharge of Public Health Wing of the Health Organisation in the district. He, too, worked under the administrative control of the Director, Health Services, Punjab. He was responsible for sanitation improvement, disease prevention and health promotion services. He was also to advise the municipalities on public health matters. In April, 1964, both these wings were amalgamated. Under the new arrangement the Chief Medical Officer is incharge of both the medical and health services in the district. Administratively the medical staff employed by Zila Parishad has also been put under his control. The staff, however, draw their salaries from the funds of Zila Parishad. This system was adopted for the purpose of increasing efficiency.

The Chief Medical Officer is assisted[1] by the Senior Medical Officer, 25 Medical Officers, 5 Assistant Medical Officers, 2 Dental Assistant Surgeons (one male and the other female), 44 Dispensers (males and females), 4 Staff Nurses, 12 Nurse Dais, one X-Ray Assistant and a Laboratory Assistant in the district.

1. The position is as on 1-11-1966.

Out of the above mentioned strength the City Dispensary has a Medical Officer, 3 Dispensers and other miscellaneous staff and the Model Town Dispensary is manned by a Doctor, 2 Dispensers, 1 Nurse and Dai besides other miscellaneous staff.

Public Hospitals.—Out of Government hospitals/dispensaries being run in the district, Civil Hospital, Ludhiana and Civil Hospital, Khanna, are noteworthy. Civil Hospital, Ludhiana, is manned by a Senior Medical Officer, three Medical Officers, eight Dispensers, two Nurses, two Nurse Dais, X-Ray Assistant, Laboratory Assistant, Dental Surgeons besides miscellaneous staff. 35,464 out-door patients, 1,886 in-door patients were treated in 1966.

The hospital, which has been constructed at a cost of Rs. 10 lakhs at Bharat Nagar Chowk is the second of its kind in the State. The first such hospital was constructed at Amritsar. The hospital will benefit about 25,000 labourers who are covered by the E.S.I. Scheme. The labourers of Gobindgarh, Phillaur, Khanna and Malerkotla will also be provided medical treatment there.

Besides the provision of clinical laboratories, an X-ray plant and two operation theatres have been set up.

The Government has also planned to construct residential quarters for the staff working in the E.S.I. Hospital at a cost of Rs. 5 lakhs.

Local Bodies.—Khanna Civil Hospital is run by one Medical Officer, three Dispensers and one Nurse Dai. The Dakha Dispensary is staffed by one Assistant Medical Officer, a Dispenser and one Nurse Dai. In the Dehlon Dispensary there are an Assistant Medical Officer, a Dispenser and one Nurse Dai. In Raikot there are one Medical Officer, one Dispenser and one Nurse Dai. In Khanna Lady Municipal Hospital there are a Medical Officer, a Dispenser and a Nurse Dai. In Jagraon there are a Medical Officer, three Dispensers and one Dai. Halwara Dispensary is run by an Assistant Medical Officer, two Dispensers, one Nurse Dai besides other miscellaneous staff.

On the health side, a Deputy Chief Medical Officer, Health (Class II), 7 Medical Officers, 16 Vaids and Hakims, 15 Lady Health Visitors, one Assistant Health Officer, 14 Sanitary Inspectors, 2 Food Inspectors, 1 Sanitary Supervisor, 32 Midwives, 19 Dispensers, 10 Trained Dais, 9 Nurse Dais besides other miscellaneous staff have been posted under the Chief Medical Officer.

14 Vaccinators including 5 Inspectors Vaccination and Sanitary Sub-Inspectors-cum-Vaccinators, 1 Dispenser along with other miscellaneous staff have been provided by the Zila Parishad.

The details of the hospitals and Dispensaries under the charge of the Chief Medical Officer are given below :

List of Hospitals, Primary Health Centres and Dispensaries in Ludhiana District

Serial No.	Name of Institution	Number of beds		Rural or Urban	Type of management	Area of Location	
		Male	Female			Tahsil	Block (if any)
1	2	3	4	5	6	7	8
	Under the Control of Chief Medical Officer						
1	Primary Health Centre, Samrala ..	8	15	Urban	State Public	Samrala	Samrala
2	Primary Health Centre, Payal ..	6	2	Do	Do	Ludhiana	—
3	Primary Health Centre, Kumkalan ..	2	2	Rural	Do	Samrala	Mangat
4	Primary Health Centre, Malaudh ..	20	20	Do	Do	Ludhiana	Dehlon
5	Primary Health Centre, Sahnewal ..	5	5	Do	Do	Do	Ludhiana
6	Primary Health Centre, Hathur ..	4	4	Do	Do	Jagraon	Jagraon
7	Primary Health Centre, Hambran ..	—	—	Do	Do	Do	Sidhwan Bet
8	Primary Health Centre, Pakhowal ..	6	2	Do	Do	Ludhiana	Doraha
9	Primary Health Unit, Machhiwara ..	4	4	Do	Do	Samrala	Machhiwara
10	Primary Health Unit, Sidhwan Bet ..	12	8	Do	Do	Jagraon	Sidhwan Bet
11	Primary Health Unit, Gurusar Sadhar ..	4	4	Do	Do	Do	Sudhar
12	School Health Clinic, Ludhiana ..	—	—	Urban	Do	Ludhiana	—
13	Provincalised Dispensary, Nurpur ..	2	2	Do	Do	Do	Mangat
14	Provincialised Dispensary, Gujarwal ..	2	2	Do	Do	Do	Pakhowal
15	Provincialised Dispensary, Katan Kalan ..	2	2	Do	Do	Do	Mangat
16	Provincialised Dispensary, Isru ..	2	2	Do	Do	Samrala	Machhiwara

17	Provincialised Dispensary, Halwara ..	2	2	Rural	Do	Jagraon	Sadhar
18	Rural Dispensary, Rauni ..	—	—	Do	Do	Ludhiana	Doraha
19	Civil Dispensary, Doraha ..	—	—	Urban	Do	Do	—
20	Civil Hospital, Ludhiana ..	28	12	Do	Do	Do	—
21	Police Hospital, Ludhiana ..	11	—	Do	State Special	Do	—
22	E.S.I. Hospital, Ludhiana ..	40	40	Do	Do	Do	—
23	Railway Hospital, Ludhiana ..	6	2	Do	Do	Do	—
24	Canal Dispensary, Ludhiana ..	—	—	Rural	Do	Do	Ludhiana
25	Canal Dispensary, Doraha ..	—	—	Do	Do	Do	Doraha
26	Jail Hospital, Ludhiana ..	18	4	Urban	Do	Do	—
27	Jail Hospital, Khanna ..	—	—	Do	Do	Do	—
28	Infectious Diseases Hospital, Ludhiana ..	5	5	Do	Municipal	Do	—
29	Civil Hospital, Khanna ..	48	20	Do	Do	Samrala	—
30	Civil Hospital, Jagraon ..	17	6	Do	Do	Jagraon	—
31	Civil Dispensary, Raikot ..	2	2	Do	Do	Ludhiana	—
32	Civil Dispensary, Ludhiana ..	—	—	Do	Do	Do	—
33	Model Town Dispensary, Ludhiana ..	—	—	Do	Do	Do	—
34	Women Hospital, Khanna ..	—	14	Do	Do	Samrala	—
35	Leprosy Hospital, Ludhiana ..	—	—	Urban	Do	Ludhiana	—
36	Civil Dispensary, Dakha ..	4	2	Rural	Zila Parishad	Jagraon	Sidhwan Bet
37	Civil Dispensary, Dehlon ..	8	4	Do	Do	Do	Dehlon
38	Rural Dispensary, Buthgarh ..	—	—	Do	Do	Ludhiana	Mangat

List of Hospitals, Primary Health Centres and Dispensaries in Ludhiana District—*concld.*

Serial No	Name of Institution	*Number of beds*		Rural or Urban	Type of Management	*Area of Location*	
		Male	Female			Tahsil	Block (if any)
1	2	3	4	5	6	7	8
	Under the Control of Chief Medical Officer—						
39	Memorial Mission Hospital, Ludhiana ..	168	324	Urban	Private Aided	Ludhiana	Ludhiana
40	Dayanand Hospital, Ludhiana ..	143	97	Do	Do	Do	Do
41	Maternity Hospital, Ludhiana ¶ ..	—	81	Do	Do	Do	Do
42	T.B. Clinic, Ludhiana ..	—	—	Do	Do	Do	Do
43	Bhagwant Memorial Hospital, Narangwal ..	—	—	Rural	Do	Do	Do
44	Gurbachan Memorial Hospital, Lalton Kalan ..	—	—	Do	Do	Do	Do
45	Gurbachan Memorial Hospital, Nathowal ..	—	—	Do	Do	Do	Sudhar
46	Gurbachan Memorial Hospital, Sidhwan Khurd ..	—	—	Do	Do	Do	Jagraon
47	Gurbachan Memorial Hospital, Bhaini Dareer ..	—	—	Do	Do	Do	Pakhowal
48	Gurbachan Memorial Hospital, Raohhine ..	—	—	Do	Do	Do	Do

(*Source* : Chief Medical Officer, Ludhiana.)

Ayurvedic and Unani Hospitals and Dispensaries.—Indigenous system of medicine is cheap and more suited to the Indian conditions. The Government have accordingly encouraged the indigenous system of medicine and has afforded facilities also for its promotion and propagation. A full fledged Ayurvedic Directorate was opened in the State. Subsequently it was merged with the Health Department.The following Ayurvedic and Unani Dispensaries are functioning in the district :—

Ayurvedic/Unani Dispensaries/Hospitals, in Ludhiana District as on 1st January, 1969.

Serial No.	Name/place of Location	Ayurvedic or Unani	Number of beds	Rural or Urban	Type of Management	*Area of Location*	
						Tahsil	Block (if any)
1	Bahlolpur	Ayurvedic	..	Rural	Government	Samrala	Machhiwara
2	Panjgrain	Do	..	Do	Do	Do	Do
3	Haidon Bet	Do	..	Do	Do	Do	Do
4	Dehru	Do	..	Do	Do	Do	Samrala
5	Kheri Nand Singh	Do	..	Do	Do	Do	Machhiwara
6	Khamano Kalan	Unani	..	Do	Do	Do	Do
7	Sarwarpur	Do	..	Do	Do	Do	Samrala
8	Tehara	Ayurvedic	..	Do	Do	Jagraon	Sidhwanbet
9	Roomi	Do	..	Do	Do	Do	Jagraon
10	Kaonke Kalan	Do	..	Do	Do	Do	Do
11	Sujapur	Do	..	Do	Do	Do	Do
12	Mundhian Kalan	Do	..	Do	Do	Ludhiana	Ludhiana
13	Jodh	Do	..	Do	Do	Do	Pakhowal
14	Dhaul Kalan	Do	..	Do	Do	Do	Dehlon
15	Barwala	Unani	..	Do	Do	Do	Ludhiana
16	Jhammat	Do	..	Do	Do	Do	Dehlon
17	Payal	Ayurvedic	..	Urban	Do	Do	Do
18	Ghaloti	Do	..	Rural	Do	Do	Doraha
19	Ghurani Kalan	Do	..	Do	Do	Do	Do
20	Khanpur	Do	..	Do	Do	Do	Do

(*Source* ; Chief Medical Officer, Ludhiana.)

(e) **Private Hospitals and Nursing Homes.**—In addition to the Government medical services available in the district, as explained above, a few prominent private hospitals in the district are the Mission Hospital, the Daya Nand Hospital and the Ludhiana Maternity Hospital. A brief description of these hospitals would, therefore, be necessary for fuller appreciation of the availability of the medical facilities in the district.

(i) **Brown Memorial Hospital and Christian Medical College, Ludhiana.**—The Christian Medical College was founded in 1894 by Dr. Miss Edith Brown. A small dispensary was also maintained in this institution. In 1894 the Memorial Hospital was built. There existed arrangements for the treatment of women only. After 1947 it has been converted into a General Hospital.

This is one of the best hospitals in the State and has been provided with the latest equipment. Necessary facilities for cobalt treatment for cancer, etc., also exist there. The hospital being linked with the Medical College has the services of very competent physicians and surgeons at its disposal. On account of its reputation and efficiency the hospital attracts a large number of patients.

41,609 out-door patients and 11,328 in-door patients were treated in the hospital during 1966.

(ii) **Daya Nand Medical Hospital, Ludhiana.**—This hospital was started in 1935 in (Madhopuri) Ludhiana. It was shifted to its present building in 1940. The hospital having its links with the Daya Nand Medical College, is of importance and caters to a large number of patients from within and without the city.

सत्यमेव जयते

In the year 1966 the number of out-door and in-door patients attended to by the hospital was 43,925 and 6,784 respectively.

(iii) **Kapur Maternity Hospital Ludhiana.**—This institution was originally working at Lahore and after partition (1947) it was shifted to Ludhiana. In the first instance it functioned in an improvised building in the Naulakha Garden. Now it has shifted to Roshni Ground, Ludhiana, and is housed in a newly constructed building. This hospital is rendering very useful service to the women folk from far and near.

7,764 out-door patients and 2,981 in-door patients were attended to in the hospital in the year 1966.

(iv) **Akki Bai Eye Hospital, Ludhiana.**—Akki Bai Eye Hospital was opened in 1960. It is managed by a trust. The source of income of the hospital are shops in the Industrial Areas and G.T. Road rented out and the donations received from the public.

The hospital is provided with 43 beds. It is manned by two doctors, two dispensers and two Nurses besides other allied ancillary staff.

31,760 out-door patients and 504 in-door patients were treated in the eye hospital in 1966.

Health Education and Propaganda.—Health propaganda and medical services are closely inter-linked, the former being preventive in character while the latter is curative. For raising the standard of general health it is also imperative to launch health propaganda. It includes propagation for cleanliness, use of protected water-supply and better and balanced diet. For achieving the object lectures on health topics are delivered throughout the district. Motos on public health and prevention from epidemic are written on walls of important places. Pamphlets and leaflets on these topics are distributed. Rural uplift conferences are held by the medical department and lectures on sanitation, water-supply and other public health subjects are periodically delivered. Slides, film-shows and exhibitions on health topics are arranged. World Health topics and Family Planning weeks are celebrated where people are educated in the field of health. Much progress has not been achieved in changing the habits of people and they do not appear to have taken to balanced diet. The main obstacle in this respect is that the overwhelming majority of the people cannot be weaned from the present form of cooking, whereby many vitamins and minerals, etc., are lost. In this field, too, pamphlets and leaflets are distributed on new methods of cooking which retain essential minerals and vitamins. The growing general education amongst the masses is expected to induce the public to change over to balanced diet.

Maternity and child welfare activities have gained considerable importance after the World War II when it was found that in Europe large numbers of children and homeless mothers were left over. UNICEF was organised and funds were raised. Scope of this form of held expanded slowly and the work of looking after the mothers and children in all the under devolped countries was taken up by this world organisation. India amongst other countries also got a substantial share of the aid.

Family Planning.—Originally it was a separate scheme. Later it formed a part of Maternity and Child Welfare Centres. During the Second Five-Year Plan the Maternity and Child Welfare Centres were opened in the rural areas in the district. This work is being done by the primary Heath Centres/ Units as well. Owing to the alarming increase of population Family Planning Scheme has acquired paramount importance.

There are Maternity and Child Welfare Centres at Gill, Bassian, Khanna, Jagraon and Pakhowal. Each centre is manned by a Lady Health Visitor and a trained Dai.

The Maternity and Child Welfare centre at Miller Ganj and Jawahar Nagar camp at Ludhiana are being run by the Ludhiana Municipality.

There are seven Family Planning Units at Samrala, Sidhwan Bet, Sudhar, Kum Kalan, Machhiwara, Sahnewal and Payal. Besides, there are three Family Planning Clinics, one urban at Civil Hospital, Ludhiana, and two rural at Hatur and Raikot. Every Family Planning Unit is manned by a Family Planning Extension Educator, 3-4 Lady Health Visitors and 8 Midwives, 4 from the Health side and 4 from Family Planning side.

In addition to the urban Health Centre at Jagraon, Maternity Hospital, Ludhiana, and Christian Medical College, Ludhiana, also attend to Family Planning work.

There are 36 Non-Family Planning Institutions in the district which supply contraceptives in Civil and Rural Dispensaries, Unani and Ayurvedic Dispensaries and Maternity Child Welfare Centres.

Training Facilities.—The Punjab Health College attached to the Christian Medical College, Ludhiana, the Daya Nand Medical College, Ludhiana, and the Ludhiana Maternity Hospital impart training to Midwives and Nurses. Punjab Health College also imparts training to Lady Health Visitors.

The workers posted in the Family Planning Clinics run by the Ludhiana Branch of the Red Cross Society are given training for 2 months at Patiala.

Flood Medical Relief.—Prior to 1947 the activities of the Medical Department in the State were of a restricted nature and hence would not render substantial relief to the flood affected areas. After independence with the construction of Bhakra Dam, the floods have almost been controlled in the district and on the other hand the activities of the State Medical Department have expanded enormously during the three foregoing Five-Year Plans. At present the Department is in a position to provide substantial relief as and when such a contigency arises.

Heavy floods occurred in the district in 1955 as a result of the torrential rains. Floods were also experienced in 1957 -1959 1960 and 1962. To meet the catastrophe emergency arrangements were made by the State Medical Department. Its attention was concentrated on medical relief and measures to check epidemics in the affected areas. This relief work was systematically organised in collaboration with the Deputy Commissioner. The staff of the dispensaries/hospitals, primary health centres and sanitation and vaccination units in the district was deputed for medical relief work. Mobile medical teams consisting of Doctors, Dispensers and Sanitary Inspectors were rushed to the affected areas. Medicines disinfectants, insecticides, antibiotics, etc., were made

available freely. Besides, the Ludhiana Red Cross Branch also distributed medicines, skimmed milk and clothes among the flood-affected people.

Prevention of Adulteration of Food Stuffs.—To check adulteration of Food an Act named Prevention of Food Adulteration Act, 1954, was passed. Under the said Act, samples are taken by the staff appointed for the purpose and duly sealed samples are sent to the Chemical Laboratory for analysis. The persons whose samples are not found up to the mark are challaned under the Act.

Two Government Food Inspectors, 2 Sanitary Inspectors, 4 Medical Officers (for Jagraon, Samrala, Payal and Doraha); 8 Sanitary Inspectors under the Ludhiana Municipal Committee; a Sanitary Additional Food Inspector under Khanna Municipal Committee and a Sanitary/Additional Food Inspector under Raikot Municipality have been appointed for checking the adulteration in food stuffs.

The work done under the said Act is detailed in Appendix IV at page 584.

The School Health Service.—The School Health Service Scheme was launched in the district during the Second Five-Year Plan. Under the scheme a school Health Clinic was started in Ludhiana in 1957. A Medical Officer, a Dental Surgeon, 1 Public Health Nurse, 3 Dispensers besides other miscellaneous staff have been provided in the clinic. Under this scheme the doctors visit the schools, examine the school children and provide them necessary medical aid. They deliver lectures to the children regarding good habits. They also enlighten them about general hygiene and cleanliness to be maintained in the Schools. The work done by the clinic from 1959 onwards may be described as follows :—

Year	No. of schools visited	No. of students examined	No. of students treated	No. of students examined by Dental Surgeon	No. of students given mass treatment for trachoma	Mass treatment yereohetitive
1959 ..	28	3,045	5,989	269	—	—
1960 ..	31	5,437	9,493	1,638	—	—
1961 ..	32	6,582	7,835	4,712	—	—
1962 ..	30	6,054	9,513	3,497	—	134
1963 ..	29	6,935	14,401	6,830	—	223
1964 ..	30	5,065	17,531	5,065	3,500	306
1965 ..	30	5,044	7,334	5,044	3,156	1,075
1966 ..	30	5,301	8,615	5,049	1,749	—
1967 ..	30	5,439	10,724	5,112	1,609	—
1968 ..	29	4,666	12,139	4,560	1,377	—

In the rural areas, the School Health Services are looked after by the Medical Officers incharge of the Primary Health Centres/Units. Medical Examinations by the Medical Officer are assisted by the Sanitary Inspector/ Dispenser and the Lady Health Visitor. The Medical Officers Incharge, Provincial Rural Dispensaries, look after the medical needs of the school children in their respective areas of jurisdiction.

Blood Bank.—There are three blood Banks in the district. One is maintained by the Red Cross Society and is located in the Daya Nand Medical College, Ludhiana. In the year 1961-62, the second Blood Bank was also started by the Brown Memorial Hospital, Ludhiana. The third Blood Bank was started in Civil Hospital, Ludhiana, from 1965. The Blood Bank maintained by Brown Memorial Hospital has necessary equipment to make blood agar from 'Discarded bottle'. The work done by these Blood Banks in respect of collection and transfusion of blood is given in Appendix V at page 585.

The history of the drainage system in the district dates back to the beginning of the 19th century when surface central drains were laid out in Ludhiana, Khanna, Raikot and Jagraon. At Khanna a *boali* (tank) was built in the heart of the town. It is said to have been constructed by Mai Sada Kaur. The reservoir was filled with water drawn by means of Persian Wheels and water was let out to flush the central surface drains in the town. At Ludhiana, Raikot and Jagraon the drains were cleaned by pouring water. The Central surface drainage system was found unsatisfactory as the pucca streets had drains in the centre and from every house a short straight sloping surface drain joined the central surface drain. It was very difficult to move about in the street during nights and especially when the drains remained blocked.

About the eighties of the 19th Century the system of surface central drainage was changed to that of side surface drains. This was decidedly better than the then prevalent system. Under the surface side drain system, there were two surface drains running on both sides and from the centre there was slope towards both sides. This system of drains still exists in the towns of the district.

Since the partition of the country the drainage system in the district has undergone a significant change. The concept of underground drainage has been generally acknowledged to be the best. In Ludhiana proper the first colony which could boast of the underground drainage system was the Model Town. Gradually the scope of this system was enlarged. By 1969 the facility of underground drainage has been extended to Jawahar Nagar Camp, Gill Road, Bharat Nagar and Civil Lines including the Agricultural University areas.

The main hurdle in the way of rapid extension of the system of drainage, however, is that residents of these localities are not willingly applying for underground drainage connections. The municipality can, however, require residents to adopt underground drainage but authorities are not imposing it stringently to avoid uncalled for opposition. It will take a long time, therefore, to introduce underground drainage in the interior of the city. This is due partly to the lack of adequate funds with the municipality and partly to the luke warm co-operation of residents of the area.

Ludhiana Municipality has also not been able to make adequate arrangements for the utilisation of the sewerage water. At present all the surface drains invariably fall into the Budha Nala. At one spot the municipality has constructed an over bridge over Budha Nala to utilise drainage water. Unless proper arrangements for the utilisation of drainage water are made the surface drainage cannot be changed to underground drainage system.

Underground drainage is the panacea for all the ills of surface drainage. Flies and mosquitos can thereby be effectively controlled. Hygienic conditions can only be ensured with the underground drainage. Diseases like malaria, diarrohea can also be checked through the system. The provision of underground drainage in big towns and cities will not only improve their general cleanliness ; but will also greatly better the working conditions of scavangers.

सत्यमेव जयते

APPENDIX I

Birth and Death Rate in Ludhiana District, 1946—68 *(vide* page 565)

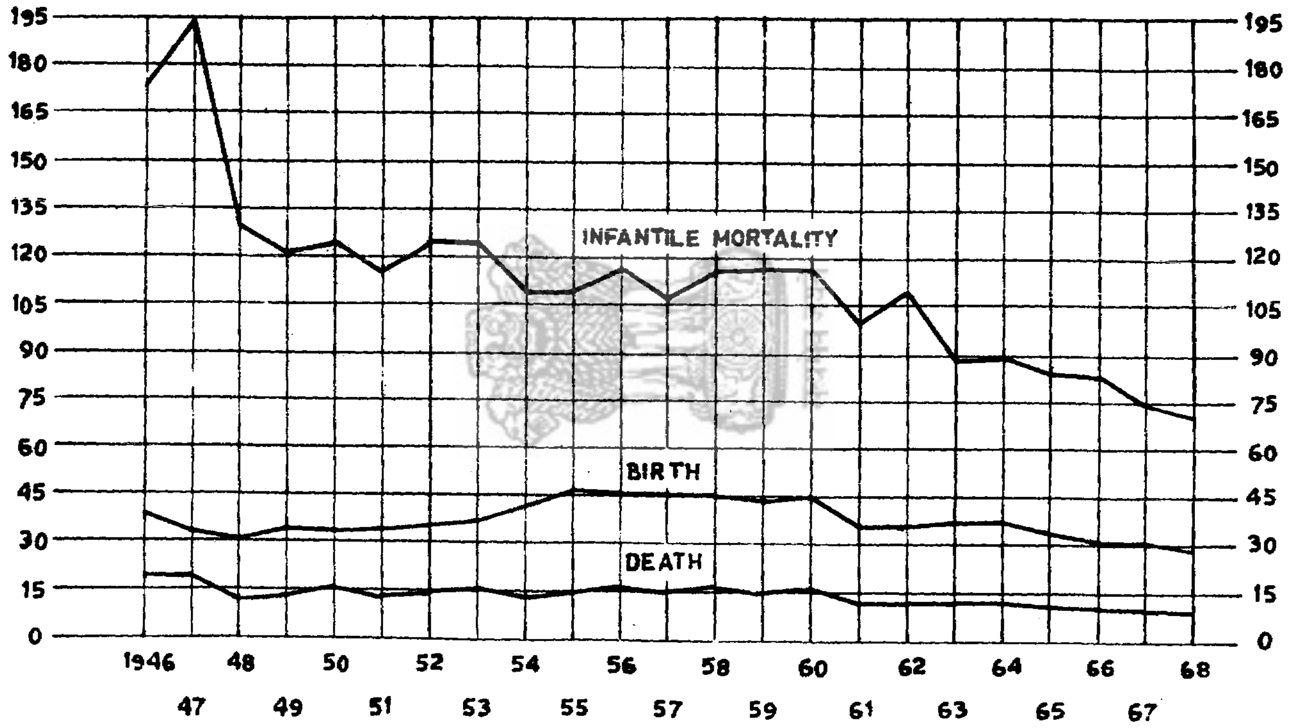
Year		Birth rate per thousand of population	Death rate per thousand of population	Infantile mortality rate under 1 year of age against per thousand live births
1946	..	38.14	19.03	172.49
1947	..	32.09	18.95	193.34
1948	..	29.73	12.42	128.86
1949	..	33.52	12.35	121.25
1950	..	33.22	15.64	125,59
1951	..	34.33	13.16	114.57
1952	..	35.35	14.02	125.64
1953	..	35.96	16.35	124.13
1954	..	41.76	13.46	109.26
1955	..	46.53	14.00	104.56
1956	..	45.66	15.72	116.28
1957	..	45.16	14.85	106.75
1958	..	45.19	16.13	115.85
1959	..	43.51	14.74	116.00
1960	..	44.19	15.54	115.39
1961	..	35.12	11.37	99.00
1962	..	34.95	11.58	108.03
1963	..	36.04	11.30	88.07
1964	..	36.44	11.62	89.19
1965	..	32.88	10.57	85.24
1966	..	30.39	10.17	83.21
1967	..	30.10	8.89	73.34
1968	..	28.54	8.80	69.84

(*Source* : Chief Medical Officer, Ludhiana)

(Figures relate to the calendar year)

सत्यमेव जयते

BIRTH & DEATH RATE PER THOUSAND OF POPULATION



Source :- Chief Medical Officer, Ludhiana

APPENDIX II

Important Causes of Mortality in Ludhiana District, 1946—68
(*Vide* pages 565—70)

Year	Cholera	Small-pox	Plague	Fever	Dysentery	Respiratory diseases	Injuries	Others
1	2	3	4	5	6	7	8	9
1946 ..	3	38	—	12,850	198	1,373	198	2,774
1947 ..	76	160	—	13,289	305	1,146	247	2,283
1948 ..	3	185	—	7,783	201	916	224	2,238
1949 ..	—	19	—	8,563	173	1,063	143	1,638
1950 ..	—	25	—	10,173	168	1,239	116	2,387
1951 ..	—	34	—	8,984	158	1,001	132	1,900
1952 ..	—	12	—	8,868	169	1,086	185	1,775
1953 ..	—	20	—	9,895	151	1,110	184	1,979
1954 ..	—	7	—	7,596	152	1,085	179	1,883
1955 ..	—	2	—	7,494	162	1,214	236	2,241
1956 ..	—	1	—	7,126	296	2,757	251	2,326
1957 ..	—	1	—	5,691	286	3,285	181	2,613
1958 ..	—	2	—	6,163	269	3,607	241	2,827
1959 ..	—	4	—	6,299	230	2,282	238	2,856
1960 ..	—	1	—	7,197	304	2,445	212	2,497
1961 ..	—	4	—	6,312	213	2,505	235	2,342
1962 ..	—	6	—	6,924	254	2,438	183	2,363
1963 ...	—	—	—	—	—	—	—	—
1964 ..	—	3	—	7,062	185	1,785	200	3,266
1965 ..	—	10	—	6,522	190	2,270	229	3,233
1966 .	—	6	—	6,397	174	1,902	207	3,435
1967 ..	—	3	—	6,028	26	1,140	138	3,882
1968 ..	—	..	—	7,127	78	1,162	108	2,265

(*Source* : Chief Medical Officer, Ludhiana)
(Calendar year)

APPENDIX III

Incidence of Smallpox in Ludhiana District, 1952—68 (*Vide* page 569)

Year		No. of cases	No. of deaths	No. of localities inspected	Primary vaccination	Re-vaccination
1952	..	69	12	23	23,353	67,237
1953	..	104	20	38	34,516	1,59,273
1954	..	45	7	8	30,939	66,287
1955	..	14	2	6	34,857	84,619
1956	..	10	1	3	34,969	65,646
1957	..	5	1	2	35,528	1,18,276
1958	..	27	2	8	35,705	1,36,564
1959	..	13	4	6	37,257	1,19,223
1960	..	1	1	1	35,951	1,17,811
1961	..	10	4	7	36,634	1,40,212
1962	..	63	6	19	36,636	2,25,041
1963	..	91	10	24	44,803	7,11,509
1964	..	10	2	3	50,116	3,76,089
1965	..	5	1	1	38,904	63,927
1966	..	21	6	6	43,408	93,728
1967	..	16	3	11	38,446	2,43,436
1968	..	—	—	—	48,064	97,032

(*Source* : Chief Medical Officer, Ludhiana)

APPENDIX IV

Work done under the Prevention of Food Adulteration Act, 1954, in Ludhiana District, 1959—68 (*Vide* page 579)

Year		Total No. of samples seized	Total No. of samples sent for analysis	Found Adulterated	Prosecutions launched	Fine realised	Imprisonment
1959	..	1,472	1,472	294	298	16,515	7
1960	..	1,252	1,252	394	381	17,640	2
1961	..	1,676	1,676	364	322	37,197	..
1962	..	..	...	..	...	...	..
1963	..	..	...	..	..	..	...
1964	..	1,937	1,937	479	425	16,081	1
1965	..	2,412	2,406	326	361	23,296	12
1966	..	2,183	2,183	338	316	23,460	9
1967	..	843	843	233	237	42,650	5
1968	..	879	879	341	300	25,400	—

(*Source*: Chief Medical Officer, Ludhiana)

APPENDIX V

Blood Bank in Ludhiana District in 1965-68

(Vide Page 580)

Name of the Institution	Year	Donors of Blood	Blood given	Trans-fusion	Blood collected in CCs	Blood discharged in CCs	Blood grouping	Blood matchings	Blood injected in CCs
1	2	3	4	5	6	7	8	9	10
1. Civil Hospital, Ludhiana	1965	1,579	1,579	1,579	4,73,700	—	2,836	1,738	—
	1966	—	—	—	—	—	12	..	—
	1967	9	9	9	9	9	18	9	—
	1968	21	21	21	21	21	84	21	—
2. Daya Nand Hospital, Ludhiana	1966	1,879	1,879	1,879	5,63,700	—	3,348	2,190	—
	1967	2,049	2,048	2,048	6,14,700	1	3,883	2,527	—
	1968	1,737	1,734	1,734	5,21,100	1	3,605	2,414	—
3. Christian Medical College and Brown Memorial Hospital, Ludhiana	1965	2,860	—	—	9,72,000	—	..	4,729	—
	1966	2,647	2,554	2,554	8,73,510	—	5,084	5,084	—
	1967	2,596	2,534	2,534	8,56,680	—	5,197	5,197	—
	1968	2,689	2,601	2,601	8,87,370	—	5,248	5,248	—

N.B.—Discarded bottles are not wasted as these are used for making blood agar.

The same bottle of blood is often cross matched for several patients before it is used for one of them.

CHAPTER XVII

OTHER SOCIAL SERVICES

Social services signify such activities of the State and individuals as are undertaken to correct social disequilibrium between individuals, classes or groups. Their scope has been continually widening. All governmental activities of progressive modern States have for their ultimate objective the general well being of the community. The State also renders many specialised services in the various spheres, e.g., education, public health, housing, etc. The modern welfare State is, thus, built on a strong framework of social services. The successive Five-Year Plans have also provided the necessary opportunities and scope for the expansion of social services.

(a) Labour Welfare

Labour welfare assumes vast importance in a State which has launched upon progressive industrialisation and the consequent urbanisation. Welfare of labour implies provision of services, facilities and amenities as may be established in, or in the vicinity of, undertakings to enable the persons employed in them to perform their work in healthy, congenial surroundings, and provide them with amenities, conducive to good health and sound morals. Labour welfare work may, thus, be broadly divided into three categories: statutory, voluntary and mutual.

Statutory welfare constitutes provisions for welfare work which depend for their observance on the coercive power of the Government. Under voluntary welfare come the activities undertaken by the employers for the workers. Mutual welfare is a co-operative enterprise of the workers to improve their lot in a suitable manner.

The origin of welfare work in India may be traced to the World War I (1914—18). Till then, welfare of the workers was hardly thought of owing to the ignorance and illiteracy of the workers themselves, the short-sightedness of the employers, the indifference of the State and apathy of the public. But, since the World War I, it has been expanding steadily, mostly on a voluntary basis. The economic depression, however, did much to dampen the interest in welfare work which the War had kindled. The Government as well as industrialists were prompted to take active interest in welfare work due to the discontent and industrial unrest that prevailed in the country, and to some extent on account of the moral pressure brought to bear on them by the work of

the International Labour Office. The World War II (1939—45) once again revived and strengthened the welfare movement, and the benefits resulting from a proper regard for the health and well-being of the employees were gradually recognised and employers co-operated with the Government in the provision of improved amenities. Active interest in welfare activities has survived the impact of the World War II. Though the welfare work in India is still considerably below the standards attained in other countries, it has come to stay.

Till the World War II, very little was done by the Government in the field of labour welfare except holding of Labour Conferences and making recommendations. This conservative policy as regards labour welfare seems to have been mainly influenced by the conditions and exigencies created by the World War II (1939—45).

Prior to Independence, there was no systematic and regular Governmental organisation for prevention and settlement of industrial disputes, for welfare of industrial workers and for dealing with other labour problems in the State. A separate Labour Department to look after the labour welfare was established as late as 1949. When the Labour Office was originally established at Ludhiana in 1956, Ludhiana formed the headquarters of the Labour Officer who was known as the Labour Officer, Ludhiana Circle, Ludhiana. On shifting of his headquarters from Ludhiana to Patiala, in October 1961, he came to be known as the Labour Officer, Patiala Circle, Patiala, and his jurisdiction extended over Patiala, Bhatinda, Sangrur, Ludhiana and Ferozepore Districts. For Ludhiana district, he is assisted by 2 Labour Inspectors, who are further assisted by one Factory Inspector and 2 Shop Inspectors, all of whom are stationed at Ludhiana. The municipal area of Jagraon is, however, under the charge of the Shop Inspector, Moga (District Ferozepore).

Besides, there is a Conciliation Officer, with headquarters at Ludhiana.[1]

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1. In September, 1967, the Conciliation Officer, Ludhiana, was made Labour-cum-Conciliation Officer, Ludhiana Circle, Ludhiana. In January, 1968 another Labour-cum-Conciliation Officer, with headquarters at Ludhiana, was appointed for Ludhiana Circle-II, which includes Ferozepore district and a part of Ludhiana District.

Thus, from the beginning of 1968, the staff of the Labour Department, posted at Ludhiana was as under :

Labour-cum-Conciliation Officer, Ludhiana Circle I, Ludhiana**	}	2
Labour-cum-Conciliation Officer, Ludhiana Circle-II, : Ludhiana**	}	
Factory Inspector	..	1
Labour Inspectors	..	3
Shop Inspectors	..	2

(**Ludhiana Circle-I covers major part of Ludhiana District, while Ludhiana Circle-II comprises Ferozepore District and a part of Ludhiana District (Covering Industrial Area 'A')

For Official administration of Labour laws and for successful implementation of labour welfare measures, the State is divided into Jullundur and Patiala Circles. Ludhiana District is included in the latter Circle.

Although under the immediate control of the Labour Officer, Patiala, Circle, Patiala, the Shop Inspectors function under the Chief Inspector of Shops and Commercial Establishments-cum-Labour Officer (Headquarters), Chandigarh. The Shop Inspectors are responsible for the administration of the Punjab Shops and Commercial Establishments Act, 1958, the Minimum Wages Act, 1948, and the Payment of Wages Act, 1936.

The Factories Act, 1948, is administered by the Factory Inspector, Ludhiana. The Labour Inspectors, the Labour Officer, Patiala Circle, Patiala, and the Conciliation Officer, Ludhiana, act as Additional Inspectors of Factories. Besides, the Deputy Chief Medical Officer of Health, Ludhiana, also functions as additional Inspector of Factories for enforcing the health and sanitary provisions contained in the Act.

The Conciliation Officer, Ludhiana,[2] is also the Conciliation Officer for the district under the Industrial Disputes Act, 1947. He initiates conciliation proceedings for the settlement of industrial disputes and tries to settle disputes by mediation and by joint discussion. If he fails the matter is referred through Government to the Labour Court, Jullundur[3], or the Industrial Tribunal, Punjab, Chandigarh[4].

Labour Legislation.—Industrialisation creates a number of social and economic problems like employment of women and children, minimum wages, trade unions, insanitary living quarters and deplorable working conditions in the factories, etc. Labour laws are, therefore, enacted to facilitate their solutions, as ordinary civil laws are inadequate to meet them. The State has adopted a progressive policy, and is keeping pace with the labour policy of the Government of India and the standards laid down by the International Labour Organisation. This has produced a plethora of legislation and their administration. These laws also deal with the regulation of industrial relations between the management and the workers.

2. The Jurisdiction of the Conciliation Officer, Ludhiana, extended to the entire city prior to September, 1968. Thereafter one more Conciliation Officer was appointed. Their designations are changed to that of Labour-cum-Conciliation Officer Circle No. I and II. The jurisdiction of the first extends to Industrial Area 'B' and city and the other's to Industrial Area 'A' and Ferozepore District.

3. The jurisdiction of the Labour Court, Jullundur,extends to the whole of the Punjab State. Its functions are mainly of a quasi-judicial nature.

4. Appointed under section 7-A of the Industrial Disputes Act, 1947, the Industrial Tribunal, Punjab, Chandigarh, plays a very important role in the redress of grievances of the industrial workers in the State. The Presiding Officer of the Industrial Tribunal frequently visits Ludhiana for adjudication of industrial disputes relating to any matter specified in schedules II and III of the Act.

The salient features of the Central and State Labour Acts in force in the district are given hereunder : The Indian Factories Act of 1948 provides for the health, safety and welfare of the workers. The Punjab Shops and Commercial Establishments Act, 1958, regulates the conditions of work and terms of employment of workers engaged in shops, commercial establishments, theatres, restaurants, etc. The Punjab Maternity Benefit Act, 1943, provides for the grant of cash benefits to women workers for specified periods before and after confinements. The Employment of Children Act, 1938, prohibits the employment of young children below the age of 15 years in certain risky and unhealthy occupations. The payment of wages Act, 1936, regulates the timely payment of wages without any unauthorised deductions by the employers. The Minimum Wages Act, 1948, ensures the fixation and revision of minimum rates of wages in respect of certain scheduled industries involving hard labour. The Industrial Disputes Act, 1947, provides for the investigation, and settlement of industrial disputes by mediation, conciliation, adjudication and arbitration. There is scope for payment of compensation in cases of lay-off and retrenchment. The Industrial Employment (Standing Orders) Act, 1946, requires employers in Industrial establishments to define precisely the conditions of employment under them and make them known to their workmen. These rules, once certified, are binding on the parties for a minimum period of six months. The Workmen's Compensation Act, 1923, provides for compensation to injured workmen of certain categories and in the case of fatal accidents to their dependants if the accidents arose out of and in the course of their employment. It also provides for payment of compensation in the case of certain occupational diseases. The Indian Trade Unions Act, 1926, recognises the right of workers to organise into trade unions, when registered, have certain rights and obligations and function as autonomous bodies. The Employees' State Insurance Act, 1948, provides for sickness benefit, maternity benefit, disablement benefit and medical benefit. The Employees' Provident Fund Act, 1952, seeks to make a provision for the future of industrial worker after he retires or in case he is retrenched, or for his dependents in case of his early death. The Punjab Industrial Housing Act, 1956, provides for the administration allotment, realisation of rent, etc., in connection with quarters constructed under the Subsidized Industrial Housing Scheme.

The labour welfare work, thus, covers a wide range of activities and in its present form is widely recognised and is regarded as an integral part of the industrial system and management.

The labour laws in the State are administered by the Labour Department headed by the Labour Commissioner, Punjab. The Employees' State Insurance Act, 1948, and the Employees' Provident Fund Act, 1952, are, however,

operated under the direction of the Employees' State Insurance Corporation and the Regional Provident Fund Commissioner, Punjab, respectively. The Labour Commissioner is assisted in his work by the Chief Inspector of Factories at the State headquarters, Labour Officers at circle level, and Factory Inspectors and Labour Inspectors and other staff at district level.

The working of important legislative enactments is given below :

Industrial Relations.—The relations between the employees and the employer are governed by the Industrial Disputes Act, 1947, and the machinery provided under it is two-fold one is for the prevention of disputes by providing internal machinery in the form of Works Committees and Welfare Officers, and the other consists of a permanent Conciliation Officer, Conciliation Board, Court of Inquiry and Industrial Tribunal. The Conciliation Officer, Ludhiana, is responsible for enforcing the provisions of the Act. He fosters good relations between the two sides of industry by removing, as far as possible, the causes of friction and by timely redress of grievances of the parties.

Even though the functions of the Conciliation Officer are purely advisory and he has no direct power to make or vary awards or agreements, he has been successful in bringing about a large number of agreements between the parties[5].

WORKS COMMITTEES

Under the Industrial Disputes Act, 1947, the factories or industrial establishments employing more than 100 persons are required to constitute a works committee for securing and preserving amity and good relations between the employers and the workmen. A works committee consists of representatives of employers and workmen engaged in the establishment, so that the number of representatives of workmen in the committee shall not be less than the number of representatives of the employers. Accordingly, 26 factories in the district come under the purview of this clause.

Trade Unions.—Trade unions are voluntary organisations of workers formed to promote and protect their interests by collective action. As the trade unions are the most suitable organisations for adjusting relations between the employers and the employees, they have acquired an important place in the economic, political and social life of the community.

Ever since the attainment of Independence, trade union movement in the district has gained considerable momentum and there has been a constant increase in the number of registered trade unions. The particulars of the trade

5. There has been no major strike in Ludhiana District during 1965 and 1966, except a general strike by the textile workers of Ludhiana in the months of March-April, 1965, which lasted for ten days.

unions, registered under the Indian Trade Union Act, 1926, which functioned in the district at the end of 1966, are given in Appendix at pages 610—12.

The Indian Factories Act, 1948.—All the Factories Acts from 1934 to 1947 were repealed and a new Act called the Factories Act, 1948, was enacted. It incorporates several provisions for the welfare of labour. To enforce the provisions of the Act and to look after the general welfare of the employees, Labour Welfare Officers have been provided in three factories at Ludhiana.

Employees' Provident Fund Scheme.—The wages of industrial workers are not so high as to enable them to accumulate substantial savings. When old age or illness renders them unfit for earning, they are forced to lead a life of abject poverty and misery. The joint-family system in its traditional form, has outlived its utility and to save the old and destitute workers from starvation deaths, there must be provisions like that of provident fund. In the event of worker's pre-mature deaths, their dependants are left without any means of subsistence. The Employees' Provident Fund Scheme, framed by the Government of India under the Employees' Provident Fund Act, 1952, and enforced on November 1, 1952, attempts to remedy this unhappy situation.

In Ludhiana District, by December 31, 1966, 424 factories/establishments with an employment strength of 12,089 workers were covered by the Act. Of these, about 7,932 workers contributed to the scheme.

Provision has also been made under the Act to grant advances to the members for payment of premiums on their life insurance policies, for purchase of dwelling sites or houses, for construction of a house, for meeting the expenses in case of serious illness, etc.

To afford timely financial assistance to the nominees/heirs of the deceased members, a Death Relief Fund was set up in 1964. A minimum of Rs. 500 is assured by way of relief. A non-refundable advance is also granted in case of the individuals' retrenchment in order to mitigate the immediate hardship caused by such an eventuality.

Employees' State Insurance Scheme.—Sickness is another important risk to be guarded against. The question of instituting a health insurance scheme had been engaging the attention of the Government of India from 1927 onwards and ultimately led to the passing of the Employees' State Insurance Act in 1948.

The scheme is compulsory wherever applicable and all workers covered under the Act must be insured. The Act, however, does not apply to a member of the armed forces or to a person whose remuneration in the aggregate exceeds Rs. 500 a month.

The Act makes provisions for the following benefits to insured persons, or, as the case may be, to their dependants: sickness benefit, maternity benefit, disablement benefit, dependants' benefit, and medical benefit. The benefits under the first four categories are in cash, while medical benefit is in kind. The Employees' State Insurance Amendment Act, 1966, introduced "Funeral Benefit" under which an amount not exceeding Rs 100 is paid to the claimants towards expenditure on the funeral of the deceased insured persons.

The Employees' State Insurance Scheme was inaugurated by the late Prime Minister, Shri Jawaharlal Nehru, on February 24, 1952, at Kanpur (Uttar Pradesh). It was extended to 7 towns in the Punjab[6], including Ludhiana, on May 17, 1953. The scheme was implemented at Khanna from February 27, 1966.

A local office of the Employees' State Insurance is functioning at Ludhiana with three pay-offices at Khanna, Abohar (Ferozepore District) and Kharar (Ropar District).[7] At Ludhiana, the medical facilities are provided to the insured persons through Panel System. A dispensary is functioning at each of the three attached centres.

Subsidised Industrial Housing Scheme.—Housing is unquestionably one of the vital problems for the industrial workers since housing and health are inter-connected and both affect industrial efficiency. The Government of India have, therefore, been making sustained efforts to encourage and assist the industrialists to build houses for their workers. The schemes formulated in 1946 and 1949 for this purpose did not prove satisfactory. It was, therefore, decided to offer more liberal terms of financial assistance to the State Governments, employers and workers for the construction of residential houses. Accordingly, in pursuance of the recommendations in the First Five-Year Plan, in September, 1952, the Subsidised Industrial Housing Scheme was introduced. Certain important modifications were made in the scheme in 1953.

Under the Subsidised Housing Scheme, there are three types of tenements for the purpose of subsidies and loans: those put up by the State Governments or Statutory bodies, such as Improvement Trusts; those put up by the industrial employers for the use of labourers in their employ; and those put up by co-operative housing societies of workers.

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[6]. The 7 cities and towns in the then Punjab State, to which the Employees' State Insurance Scheme was extended on May 17, 1953, were : Amritsar, Ambala, Jullundur, Batala, Abdullapur, Bhiwani and Ludhiana. Since then, the scheme has been extended to other areas also.

[7]. By March 31, 1966, there were 17,750 insured persons at Ludhiana besides 700 at one of the attached stations at Khanna. During 1965-66, there were 320 factories covered under the scheme at Ludhiana and Khanna in respect of which 260 accident reports were received in the local office at Ludhiana in respect of Ludhiana and Khanna. The total amount of cash benefit paid to the insured persons during the same year in respect of these two stations was Rs. 1,13,910·92.

The State Government, thus, constructed colonies in Ludhiana for the industrial workers in the Industrial Area 'B'. Each colony consisted of 126 one-room houses and 124 two-room houses, to be allotted to industrial workers at a nominal rent of Rs 10 and Rs 16, per mensem, respectively.

Labour Welfare Centre.—Started in 1953, a Labour Welfare Centre is working at Ludhiana under the Labour Commissioner, Punjab, Chandigarh. It provides educational as well as recreational facilities to industrial workers and their children. The women are imparted training in tailoring and embroidery. In-door and out-door games are organised in the centre for the workers and a radio-set and musical instruments are provided for recreation. There is a library for the use of workers. Cultural and variety programmes are also organised occasionally in the centre for the entertainment of the workers.

(b) Prohibition

Ludhiana District is not a dry area. In 1965-66, there were 46 country liquor vends and 5 foreign liquor vends in the district. There is, however, no distillery in the district.

The consumption of excisable articles in the district, during the period 1962-63 to 1965-66, is given below :

Year		Country liquor (Proof Litres)	Indian made foreign type of liquor (Proof Litres)	Foreign liquor (Proof Litres)	Beer (Bulk Litres)	*Bhang* (Kgs.)	Opium (Kgs.)
1962-63	..	2,57,255	18,583	765	70,489	650	1·705
1963-64	..	3,91,104	21,823	362	78,791	450	1·042
1964-65	..	5,93,051	36,650	510	1,56,351	688	1.282
1965-66	..	6,04,963	44,673	581	1,14,665	..	1·436

(*Source* : Excise and Taxation Officer, Ludhiana)

The Excise and Taxation Officer, Ludhiana, assisted by one Excise Inspector and five Excise Sub-Inspectors, administers the Excise and Opium Acts in the district. The number of cases detected under these Acts, during the period 1961-62 to 1965-66, is given below :

Year		*Number of cases detected*		
		Excise Act	Opium Act	Total
1961-62	..	822	515	1,337
1962-63	..	1,031	596	1,627
1963-64	..	959	1,051	2,010
1964-65	..	1,026	1,005	2,031
1965-66	..	1,272	906	2,178

(*Source* : Excise and Taxation Officer, Ludhiana)

(c) **Advancement of Backward Classes and Tribes**:

The caste system served a useful purpose when it was originally devised. In the early stages it permitted considerable inter-caste mobility and served as a useful measure for the division of labour according to the talents of individuals and groups. Thus the system originally conceived as a practical method of dividing labour with the object of securing maximum of social efficiency and responsibility with minimum of social friction has hardened during the centuries into a rigid mould which hampers national progress. Caste system has raised strong walls of mutual exclusiveness. Some castes began to look down upon others instead of realising that all were equally essential parts of society and the national economy. In this way nearly a fifth of the population of India came to be considered as belonging to the bottom rung of the social ladder. Even among these, there were further sub-divisions and many millions all over the country were treated as untouchables and out-castes.

Prior to 1950, the classification of Scheduled Castes and Tribes was governed by the Government of India (Scheduled Castes) Orders, 1936, and the Thirteenth Schedule of the Government of India (Provincial Legislative Assemblies) Order, 1936. The tribes thus classified were termed as Backward Tribes.

The tahsil wise population of Scheduled Castes and Ad Dharmis in the year 1941 is given below:

Tahsil-District	Scheduled Castes			Ad Dharmis		
	Males	Females	Total	Males	Females	Total
Ludhiana Tahsil	18,369	15,597	33,966	1,074	899	1,973
Jagraon Tahsil	6,133	5,790	11,923	1,070	908	1,978
Samrala Tahsil	7,996	6,547	14,243	605	481	1,086
Ludhiana District	32,498	27,934	60,432	2,749	2,288	5,037

(*Census of India*, 1941, *Vol. VI*, *Punjab*, p. 60)

The declaration of Scheduled Areas by the Presidential Order of 1950 did not include Ludhiana District in the specified category. Hence, in the 1951 Census, the population of Scheduled Tribes in the district was not recorded. However, the population of Scheduled Castes in 1951 was as under :

Tahsil/District	Number of Scheduled Castes
Tahsil Ludhiana ..	68,185
Tahsil Jagraon ..	55,276
Tahsil Samrala ..	42,083
Total ..	1,65,544

While the Thirteenth Schedule to the Government of India (Legislative Assembly) Order, 1936, did not specify any areas as Scheduled Areas, the Constitution (Scheduled Tribes) Order, 1950, indicated in the Schedule appended to the Order certain specified areas, and the listed tribes who could be regarded as Scheduled Tribes, if they lived in these Scheduled areas.

Apart from the Scheduled Castes and Scheduled Tribes, the State Government also prepared a provincial list of Backward Classes. The Scheduled castes and Scheduled Tribes residing outside the areas specified in the Constitution (Scheduled Castes) Order, 1950, respectively, were deemed to be Backward Classes for the purpose of provincial list.

According to the Constitution (Scheduled Castes) Modification Order, 1956, following is the list of Scheduled Castes so far declared as such in the district :—

Scheduled Castes, Vimukt Jatis and Other Backward Classes : The following Scheduled Castes, Vimukt Jatis (Denotified Tribes) and other Backward Classes resided in the district. Their main professions are noted against each. Though continued for centuries the professions are now gradually changing under the modern economic, social and political conditions :—

S. No.	Name	Main Profession
	Scheduled Castes	
1	Ad-dharmi	.. Farmig and shoe-making
2	Batwal	.. Labour
3	Balmiki, Chura or Bhangi	.. Scavanging, sweeping, labour and pig breeding.
4	Bhanjra	.. Cane-work and *chik*-making
5	Chamar, Ramdasi	.. Tanning, Shoe-making, weaving and agriculture.
6	Dhanak	.. Weighmen and grain-sifters
7	Kabirpanthi or Julaha	.. Weaving and labour
8	Mazhbi	.. Agriculture
9	Megh	.. Labour
	Vimukt Jatis	
1	Bazigar	.. Agriculture, milk selling, labour and beggary
2	Bauria or Bawaria	.. Agricultural labour
3	Daiya	.. Hunting and *Chhaj* making

4	Sansi	.. Agricultural labour
5	Kuchband (a sub-caste of Sansi)	.. Rope and net making

Backward Classes

1	Bairagi or Baragi	.. Palmistry, labour and beggary
2	Bhat	.. Palmistry, labour and beggary
3	Bhuhalia Lohar	.. Iron smith
4	Chhimba, Chhipi, Chhimpa, Darzi	.. Tailoring, cloth merchant
5	Dhobi	.. Washing of Clothes
6	Kamboj	.. Agriculture
7	Khati	.. Carpentry
8	Kumhar	.. Pottery and donkey transport
9	Labana	.. Cultivation, agricultural labour
10	Lohar	.. Iron smiths and repair work
11	Nalband	.. Heel-tip affixing
12	Nai	.. Barber
13	Pinja, Penja	.. Carding
14	Rai Sikhs	.. Cultivation
15	Teli	.. Oil pressing

Measures adopted for betterment of Scheduled Castes, Vimukt Jatis and Other Backward Classes.—

For the last several decades social reformers in the country have worked for the uplift of depressed millions. Efforts have been made to bring them to the level of general life of the other communities, for their recognition not only as human beings with the same feelings and aspirations as the rest; but also as equal citizens of the country and co-sharers in the struggle for improvement of living standards of the masses.

With the advent of freedom, the Constitution recognised the need for safeguards, laws and administrative measures to ameliorate the lot of those whom Mahatma Gandhi described as 'Harijans' or God's own people.

In accordance with the special provisions in the Constitution of India, the Punjab Government undertook to promote the interests of Scheduled Castes, Scheduled Tribes and other Backward Classes. Punjab was one of the first States to enact legislation for abolition of untouchability. As early as 1948, the Punjab Removal of Religious and Social Disabilities Act was passed to ensure free and unhindered use of public places by the Harijans. With the enforcement of the Untouchability (Offences) Act, 1955, in the entire country from June, 1955, the last vestiges of disabilities, religious and social, from which Harijans had suffered for centuries ware sought to be removed.

The Directive Principles, as laid down in the Constitution enjoin upon the States to take special measures to ameliorate the lot of the hitherto neglected classes and tribes. Accordingly, every possible attempt is being made to afford the Backward Classes greater opportunities to develop socially and economically. The Directorate of Welfare of Scheduled Castes and Backward Classes, Punjab, Chandigarh, attends to the work of the uplift and advancement of the Scheduled Castes and Backward Classes in the State. To look after this work at the district level, the office of the District Welfare Officer, Ludhiana, was established in 1956. He is assisted by 3 Tahsil Welfare Officers posted one each at the tahsil headquarters at Ludhiana, Samrala and Jagraon. Besides, there are seven community centres in the district at Barewal, Bhoura and Sahnewal in Ludhiana tahsil; Ramgarh, Kheri Naudh Singh and Paproudi in tahsil Samrala; and Mohi in tahsil Jagraon. At each of these, 1 Male Social worker 1 Lady Social Worker and 1 Lady Attendant are posted.

The Male Social Workers hold adult classes and deliver lectures on the removal of untouchability and also work for the uplift of the Harijans within the radius of five miles from their respective community welfare centres.

The Lady Social Workers hold sewing and *balwadi* classs and *sat sangs* in the community centres. They deliver lectures to Harijan women on the care of babies and general cleanliness. Besides, they visit Harijans *bastis* and deliver lectures on the removal of untouchability.

The Lady Attendants are trained Dais and provide maternity aid.

The Constitution has provided for the reservation of seats for the Schedules Castes in the Parliament and the State Legislatures. These preferential concessions, ordered to be granted for ten years from the date India became a Republic (1950), have since been extended for a further period of ten years upto 1970. A number of seats have also been reserved for these communities in the Panchayats, Panchayat Samitis and Zila Parishads.

Harijans' Welfare in the State is a four-pronged drive conducted through the Welfare, Industrial Training, Education and Local Self-Government Departments. Various measures taken in this regard are detailed below :

I—WELFARE DEPARTMENT

The State Welfare Department has undertaken to implement the following schemes under the Five-Year Plans for the welfare of the Scheduled Castes, Vimukt Jatis and other Backward Classes:—

(i) **Subsidy for construction of new houses.**—Members of Scheduled Castes and Vimukt Jatis are at the lowest rung of the society and by and large they live in slums, congested houses, mostly in *chhapars*. To provide shelter to the homeless members of these classes, subsidies are granted for the construction of houses. The houses subsidised under the scheme are generally built in the form of colonies. Unskilled labour and sites are provided by the beneficiaries. A house consists of one room, one varandah, a kitchen and courtyard on a total area of about 5 or 6 marlas. A subsidy (Rs. 600 from 1956-57 to 1958-59, raised to Rs. 750 from 1959-60 to 1964-65, and further raised to Rs. 900 from 1965-66 onwards) is granted to the deserving persons.

The beneficiaries under the scheme are called upon to give an undertaking not to alienate the properties so acquired. As such, the proprietary rights of the house remain vested in Government for a period of 20 years and thereafter it becomes the property of the beneficiary. The latter enjoys, however, free use of the house during this period.

The total amount of subsidies granted, the number of beneficiaries and name of their community, and the places where colonies were built, during Second and Third Five-Plan Plans, 1956-57 to 1965-66, are given below :

Year	Amount disbursed	No. of beneficiaries	Name of Community	Places where colonies built	
				Village	Tahsil
1	2	3	4	5	6
Second Five-Year Plan—					
1956-57 ..	12,600	21	Scheduled Castes	Bhilwan	Ludhiana
	7,800	13	Vimukt Jatis		
1957-58 ..	15,600	26	Scheduled Castes	Bhoura	Ditto
	4,200	7	Vimukt Jatis	Gil	Dito
1958-59 ..	17,400	29	Scheduled Castes	Jugiana	Ditto
	4,800	8	Vimukt Jatis	Lilan	Jagraon
1959-60 ..	15,750	21	Scheduled Castes	Machhiwara	Samrala
	4,500	6	Vimukt Jatis	Halwara	Jagraon
1960-61 ..	15,750	21	Scheduled Castes	Chimna	Jagraon

1	2	3	4	5	6
	4,500	6	Vimukt Jatis	Harion Khurd	Samrala
Third Five-Year Plan—.					
1961-62 ..	16,500	22	Scheduled Castes		
			Vimukt Jatis		
1962-63 ...	12,750	17	Scheduled Castes		
			Vimukt Jatis		
1963-64	18,750	25	Scheduled Castes		
			Vimukt Jatis		
1964-65 ..	23,400	26	Scheduled Castes		
			Vimukt Jatis		
1965-66 ..	13,500	15	Scheduled Castes		
			Vimukt Jatis		

(*Source* : District Welfare Officer for Scheduled Castes and Backward Classes· Ludhiana)

(ii) **Subsidy for purchase of house sites.**—The Harijan *bastis* are generally over-crowded. In order to solve this problem, a subisdy of Rs. 200 is given to each deserving and needy member of the Scheduled Castes for the purchase of a house site measuring about 10 marlas. The scheme was introduced in the district in 1958-59. The amount sanctioned and the number of house sites provided, during 1958-59 to 1965-66, are given below :

Year		Amount sanctioned	House sites provided
		Rs.	
1958-59	..	2,800	14
1959-60	..	3,000	15
1960-61	...	3,000	15
1961-62	..	1,800	9
1962-63	..	1,400	7
1963-64	..	1,200	6
1964-65	...	1,400	7
1965-66	...	2,200	11

(*Source*: District Welfare Officer for Scheduled Castes and Backward Classes, Ludhiana)

(iii) **Land Scheme.**—Subsidy for the purchase of agricultural land and construction of houses/wells thereon is given under the Centrally Sponsored Land Scheme.

The members of Scheduled Castes and Vimukt Jatis predominantly depend on agriculture, but most of them have no land of their own. They thus earn their livelihood by taking land on lease or on *batai,* which does not yield enough proudce for the maintenance of an average family. In order to help the needy, poor and deserving landless agriculturist members of Scheduled Castes and Vimukt Jatis, a subisdy of Rs. 2,000 each is granted to them for the purchase of agricultural land. They contribute Rs. 2,500 each either from their own pocket or by raising loan from the Land Mortgage Bank. The total amount of Rs. 4,500 is used for the purchase of land at the rate of not less than 5 acres per person. The beneficiaries are required to cultivate the land personally. An additional sum of Rs. 450 is also granted as a subsidy to the purchasers to meet the enhanced stamp duty for the registration of sale deed.

The amount of subisdy of Rs. 2,000 per person during the Second Five-Year (1956-61) for the purchase of agricultural land was raised to Rs. 2,500 during the Third Five-Year Plan , i.e. frcm 1961-62 onwards.

The members of Scheduled Castes and Vimukt Jatis, who are selected for the grant of subsidy for the purchase of agricultural land under the above scheme are required to settle at the places where land is purchased for them. Being financially poor, it is not possible for them to construct houses or wells. A subsidy of Rs. 500 each is, therefore, given to the beneficiaries for this purpose.

The amount of subsidy granted and the number of beneficiaries, i.e., persons settled on land, under the land Scheme, during the Second and Third Five-Year Plans from 1956-57 to 1965-66, are given below :

Year	Amount disbursed as subsidies		No. of beneficiaries	Remarks
	Purchase of agricultural land	Construction of houses on land		
	Rs.	Rs.		
Third Five-Year Plan—				
1956-57 ..	44,000	11,000	22	Colony set up.
1957-58 ..	48,000	12,000	24	Subsidy for purchase of five acres of agricultural land for each person was Rs. 2,000 during Second Five-Year Plan, but it was raised to Rs. 2,500 from 1961-62 on wards. Subsidy for construction of houses on this land Rs. 500 each person.
1958-59 ..	48,000	12,000	24	
1959-60 ..	46,000	11,500	23	
1960-61 ..	48,000	12,000	24	

Year		Amount disbursed as subsidies: Purchase of agricultural land	Amount disbursed as subsidies: Construction of houses on land	No. of beneficiaries	Remarks
Third Five-Year Plan—					
1961-62	..	40,000	8,000	16	
1962-63	..	55,000	11,000	22	
1963-64	..	50,000	10,000	20	
1964-65	..	15,00	3,000	6	
1965-66	..	45,000	9,000	18	

(*Source*: District Welfare Officer for Scheduled Castes and Backward Classes, Ludhiana)

(iv) **Facilities for drinking water.**—In most of the villages inhabited by the members of the Scheduled Castes and Vimukt Jatis or in the isolated *bastis* of these people in a number of villages, there are no drinking-water wells. Where the wells exist, a large number of these need repairs. To remove these difficulties and to provide facilities for fresh drinking-water, new wells are sunk at a large number of places and repairs to old ones are carried out. Even though these new wells are likely to be in or near the *bastis* of Scheduled Castes and Vimukt Jatis, these are open to other people as well. Unskilled labour is provided free by the beneficiaries for the construction or repair of such wells.

The amount of subsidies granted for sinking of new wells and renovation of old ones, installation of hand-pumps etc., in the district, during the Second and Third-Five Year Plans from 1956-57 to 1965-66, is given below :

Year		Amount disbursed	No of wells sunk/repaired, pumps installed etc.
		Rs.	
Second Five-Year Plan—			
1956-57	..	3,500	24
1957-58	..	2,800	26
1958-59	..	2,800	28
1959-60	..	2,800	21
1960-61	..	2,800	21
Third Five-Year Plan—			
1961-62	..	6,500	19
1962-63	..	4,500	24
1963-64	..	9,700	19
1964-65	..	2,000	10
1965-66	..	2,000	10

(*Source*.—District Welfare Officer for Scheduled Castes and Backward Classes, Ludhiana).

(v) **Community Centres.**—One of the best methods for eradication of untouchability is by means of well-organised community centres known as Sanskar Kendras and *Balwadis*. These are started at places which are mainly inhabited by the Scheduled Castes. In a centre there are two paid social workers, one man and one woman, besides a Lady Attendant, preferably trained Dai, who handles maternity cases free of charge. The programme is so arranged that the centre is used by children, men and women at different times of the day. The children are taught cleanliness, songs, games, good behaviour and good habits. They are fed also. Women are taught social education, cooking, first-aid, home- nursing, care of the baby, mending of clothes, etc. Some crafts are also taught. Similarly, men are given facilities of discussion, entertainment, games, etc. Arrangements for imparting adult education to men and women are also made. A reading room is also provided and arrangements for in-door and out-door games and training in gardening exist. In fact the centre affords facility for the so called untouchables and caste people to mix freely.

The Government gives a subsidy of Rs. 7,000 for a community centre, Rs. 2,000 towards the construction of buildings, Rs. 2,000 for equipment and Rs. 3,000 for the staff. The recurring expenditure on maintenance is about Rs. 4,500 per annum. The beneficiary village has to provide a free site for the community centre and the amount required over and above the subisdy of Rs. 2,000 for the construction of building.

Under this Scheme, 7 community centres at Ramgarh, Mohi, Barewal, Bhoura, Rajgarh, Manupur and Khamano Kalan were functioning in the district upto March, 31, 1966.

The number of community centres established and the amount spent on these in the district, during the Second and Third Five-Year Plans from 1956-57 to 1965-66, are given below :

Year		No. of Community Centres established	Amount spent on buildings	Amount spent on material and staff
			Rs.	Rs.
Second Five-Year Plan—				
1956-57	..	1	2,000	5,000
1957-58	..	1	2,000	5,000
1958-59	..	1	2,000	5,000
1959-60	..	1	2,000	5,000
1960-61	..	1	2,000	5,000
Third Five-Year Plan—				
1961-62	..	1	2,000	5,000
1962-63	..	—	—	—
1963-64	..	1	2,000	5,000
1964-65	..	—	—	—
1965-66	..	—	—	—

(*Source*: District Welfare Officer for Scheduled Castes and Backward Classes, Ludhiana)

(vi) **Legal Assistance.**—To protect the members of Scheduled Castes, Vimukt Jatis and other Backward Classes against the tyranny of landlords or other exploiting classes, they are provided legal assistance by Government to defend cases against them in connection with ejectment from land or other properties. The scheme is implemented by the Deputy Commissioner who arranges part-time counsels to take up all such cases on payment of suitable remuneration.

Legal assistance is afforded by Government to members of Scheduled Castes, Vimukt Jatis and other Backward Classes to fight out cases of the following nature :—

(a) For defending :—

(i) Criminal cases instituted on private complaints including security proceedings under chapter VIII of the Code of Criminal Procedure, 1898, instituted on such complaints.

(ii) Cases of ejectment from land and other immovable property.

(iii) Cases of recovery of rent by landlords.

(iv) Cases pertaining to correction of Khasra Girdawaris by landlords, etc.

(b) For instituting :—

(i) Cases pertaining to deposit of rent with a Revenue Officer when landlord refuses to receive, or give a receipt for any rent payable in money when tendered to him or when there is a doubt as to the person entitled to receive rent payable in money.

(ii) Cases pertaining to the correction of Khasra Girdwaris.

(iii) Cases involving a claim to a right of way or usage.

(iv) Cases involving forcible removal of dung heaps.

(v) Cases involving a claim for compensation for harassment caused on account of observance of untouchability, denial of drinking water, denial of entry into a temple or hotel, etc.

The scheme was introduced in the State in 1958-59. The amount provided in the form of legal assistance and the number of beneficiaries in the district, during the period 1958-59 to 1965-66, are given below :

Year		Amount allotted
		Rs.
Second Five-Year Plan		
1958-59	..	2,500
1959-60	..	2,500
1960-61	..	2,000
Third Five Year Plan—		
1961-62	..	—
1962-63	..	—
1963-64	..	800
1964-65	..	—
1965-66	..	—

(*Source*:—District Welfare Officer for Scheduled Castes and Backwerd Classes, Ludhiana)

(viii) **Midwifery training.**—In view of their backwardness and lean financial condition, the members of Scheduled Castes, Vimukt Jatis and other Backward Classes cannot arrange proper training of women in midwifery classes. To help them in getting such training in the health centres, started by the Health Department, a scheme for grant of stipends, etc., to *dais* has been sanctioned.

Under this scheme, candidates are granted a stipend of Rs. 20 per mensem for a period of one year. In addition, each *Dai* is paid a sum of Rs. 50 per purchase of a maternity kit and liveries.

(viii) **Interest-free loans.**—After completion of the academic or professional courses, persons belonging to Scheduled Castes, Scheduled Tribes and Backward Classes find it difficult to establish themselves in the professions of law, medicine, engineering and architecture on account of lack of financial resources. To remove this handicap and also to help them in setting up an industry or

establishing themselves in business, they are granted interest-free loans upto Rs. 2,000 in each case.[8] These loans are granted under the Punjab Backward Classes (Grant of Loans) Act, 1957. The loans are recoverable in 20 half-yearly instalments which commence after the lapse of four years from the date of the drawal of the loan.

The scheme was introduced in 1958-59. The amount disbursed and the number of the beneficiaries, during 1958-59 to 1965-66, are given below :

Year		Amount disbursed	No. of beneficiaries
		Rs.	
Second Five-Year Plan			
1958-59	..	5,500	10
1959-60	..	5,500	11
1960-61	..	5,500	9
Third Five-Year Plan			
1961-62		11,000	22
1962-63	..	11,000	19
1963-64	..	9,720	19
1964-65	..	10,220	23
1965-66	..	10,200	21

(*Source*: District Welfare Officer for Scheduled Castes and Backward Classes, Ludhiana).

8. The trades which are included for granting interest-free loans are 32 in number as under :

shoe-making ; pottery ; weaving ; cycle repair ; poultry ; wood-work ; sewing ; trailoring and embrodiery; basket making, *ban* making; piggery, *newar* making; *dari* making ; blacksmithy ; bamboo industry ; Khadi industry (handloom) ; legal practice ; soap making ; pipe fitting ; rubber industry ; bakery and confectionery ; leather tanning ; lock making ; spare parts industry ; furniture industry ; oil *kohlu* ; iron industry ; dairy farm ; cattle breeding ; Ayurvedic practice ; barber shop ; flour mill (*chakki*) and dyeing.

II. Industrial Training Department

Several schemes are run by the State Industrial Training Department in order to provide training in various engineering and non-engineering trades. Of these, the following schemes merit special mention :—

(i) **Industrial Training Centres.**—Under this scheme, the department is running a number of Industrial Training Centres for imparting training in different vocational trades throughout the State. Admission in these centres is exclusively reserved for the trainees belonging to Scheduled Castes, Vimukt Jatis and other Backward Classes. One such centre is at Jagraon in Ludhiana district where training in repair of cycles, sewing and socks manufacturing machines is given.

Free training is provided to the candidates belonging to these communities aged between 14 and 25 years. A stipend of Rs. 25 per month is awarded to each of the trainees belonging to Scheduled Castes and other Backward Classes and Rs. 45 per month to each of the Vimukt Jati candidate for the duration of the course, i.e. one year.

(ii) **Industrial Training in Mills, Factories and Institutions.**—This scheme envisages the award of stipends to candidates belonging to Scheduled Castes, Vimukt Jatis and other Backward Classes who get training in different vocational or technical trades in the various Industrial Training Institutions, Centres, Schools, etc., of the State Training department and also in different mills and factories in the private sector. During the course of the training, which is generally one year, each candidate is granted stipend of Rs. 25 per month if he belongs to a Scheduled Caste or a Backward Class and Rs. 45 if he belongs to a Vimukt Jati.

(iii) **Industrial Training Institutes.**—Under this scheme, training is imparted in various engineering and non-engineering trades. Twenty per cent of the seats are reserved for the trainees belonging to Scheduled Castes and two per cent for those belonging to Backward Classes. A stipend of Rs. 40 per month is awarded to 60 per cent of the trainees belonging to these classes on poverty-cum-merit basis. Free education, free medical and recreational facilities, free workshop clothing and free hostel accommodation, subject to availability of seats, are also provided.

(iv) **Industrial Schools for boys and girls.**—In these schools, training is imparted in various vocational engineering trades. Twenty per cent of the seats are reserved for the trainees belonging to the Scheduled Castes and two percent for those belonging to the Backward Classes. Stipends are awarded to a limited number of trainees on poverty-cum-merit basis. Free training is provided to all.

(v) **Other special training institutes.**—In other special training institutes, 20 per cent and 2 per cent of the seats are reserved for the trainees belonging to Scheduled Castes and Backward Classes, respectively. Besides free training, stipends are also awarded to deserving candidates.

III. Education Department

Being educationally most backward and economically poor, the members of Scheduled Castes, Vimukt Jatis and other Backward Classes put their children to work on odd jobs in order to supplement their meagre income. As a result, they do not send them to schools. Therefore, liberal concessions, such as grant of stipends, exemption from tution fees, reimbursement of public examination fees, etc., are granted to them by the State Education Department to persuade them to educate their children.

IV. Local Self-Government Department

Representative Institutions.—The institutions that function in the district for the uplift of the Scheduled Castes and Backward Classes, are mainly concerned with activities for the removal of untouchability and other social evils under guidance of Harijans leader as detailed below :

(1) Depressed Classes League, Punjab, Regd., Head Office, Ludhiana.

(2) The Grah Vihin Vimukt Jatis Sudhar Sabha, Regd., Ludhiana.

(3) Backward Classes League, Punjab, Regd., Head Office, Ludhiana.

(4) Harijan Welfare Section, District Congress Committee, Ludhiana.

(5) Balmik Sabha, Ludhiana.

(6) Nai Federation, Ludhiana.

(d) Other Social Welfare Activities

Social services cover a wide range of activities which may not be possible to describe here. A brief account of the Old Age Pension Scheme is, however, given below :

Old Age Pension Scheme.—This scheme has been started by Punjab Government since 1964 with the aim of providing social security through the grant of financial assistance to destitute old and disabled persons who are without any means of subsistence and no body is in a position to support them in the evening of their lives.

The rate of old age pension was Rs. 15 per head; but it has been raised to Rs. 25 from July, 1968. In the district the number of persons in receipt of old age pension was 890 in 1968.

(e) Public Trusts, Charitable Endowments, Muslim Wakfs, etc..

Charitable endowments have their own part to play in society. Many educational institutions, hospitals, *dharamshalas* and other social welfare organisations are either started or are materially assisted in their maintenance with the help of funds provided by philanthropists. There are also revenue-free grants of land attached to religious endowments in various tahsils.

Besides, there are a number of Muslim Wakfs, with properties attached to them in many cases in various towns. Their administration is regulated by the Wakf Act (Central) of 1954. The *Mutawallis* of most of them migrated to West Pakistan after partition. Such of the religious endowments as have no '*Mutwallis*' are managed by the Punjab Wakf Board. The income derived from the properties of the Wakfs is spent for the upkeep of the institutions and for the purpose for which they were created or intended, and the surplus goes towards charitable purposes or towards the promotion of education, both religious and secular, of the particular community.

Public Trusts.—There were 29 registered public trusts in the district as on March 31, 1966, as detailed below :

Serial No.	Nature of public trusts	Number of public trusts			
		Tahsil Ludhiana	Tahsil Jagraon	Tahsil Samrala	District Ludhiana
1	Purely religious	—	1	1	2
2	Educational	—	8	—	8
3	Rendering of other social services	—	—	—	—
4	Partly religious and partly charitable	—	15	—	15
5	Running of *Dharamshalas*, etc.	—	1	2	3
6	Medical	—	1	—	1
	Total	—	26	3	29

(*Source* : Tahsildars, Ludhiana, Jagraon and Samrala)

APPENDIX

List of Trade Unions Registered under the Trade Unions Act, 1926. functioning in Ludhiana District at the end of 1966.

(Vide pages 364 and 591)

Serial No.	Name of the Union		Date of registration
1	Home Hosiery Manufacturers Union, Ludhiana	..	4-9-41
2	Northern India Hosiery Manufacturing Corporation, Ludhiana	..	28-7-50
3	Bharat Hosiery Manufacturers Association, Ludhiana	..	24-6-51
4	Hosiery Workers Union, Ludhiana	..	21-2-52
5	District Textile Workers Union, Ludhiana	..	10-6-55
6	Ludhiana Transport Workers Union, Ludhiana	..	11-11-55
7	Palladar Workers Union, Khanna	..	2-12-55
8	District Motor Transport Workers Union, Ludhiana	..	30-4-56
9	Municipal Employees Union, Khanna	..	22-6-57
10	Municipal Mechanical Workers Union, Ludhiana	..	8-9-57
11	All India Defence (Civil) Union, Halwara	..	3-10-57
12	Northern Zone Railway Union, Ludhiana	..	17-2-58
13	Hosiery Workmen Association, Ludhiana	..	6-2-59
14	Punjab Animal Husbandry Class IV Employees Union, Doraha	..	18-3-59
15	Ludhiana Iron and Steel Workers Union, Ludhiana	..	29-9-59
16	District Iron and Steel Workers Union, Ludhiana	..	10-11-59
17	Shops and Commercial Employees Union, Khanna	..	11-12-59
18	Trade Employees Union, Jagraon	..	19-12-59
19	General Labour Union, Khanna	..	28-5-60
20	City Rickshaw Workers Union, Ludhiana	..	22-8-60
21	Municipal Employees Union, Jagraon	..	21-9-60
22	Rickshaw Workers Union, Ludhiana	..	26-9-60
23	Dayanand Hospital Sweepers Union, Ludhiana	..	16-11-60
24	Road Transport Workers Union, Ludhiana	..	17-1-61
25	Shawl Manufacturers Association, Ludhiana	..	20-7-61

Serial No.	Name of the Union	Date of registration
26	Hosiery Industry Welfare Board, Ludhiana ..	18-9-61
27	Zila Parishad Beldar Workers Union, Ludhiana ..	24-10-61
28	Ludhiana Machine Tools Makers Guild, Ludhiana ..	24-10-61
29	Ludhiana District Brick Kilns Workers Union, Ludhiana ..	24-4-62
30	Cottage Hosiery Manufacturers Association, Ludhiana ..	2-7-62
31	Ludhiana Foundry and Engineers Association, Ludhiana ..	18-7-62
32	Hosiery Mazdoor Union, Ludhiana ..	27-7-62
33	Municipal Workmen Association, Ludhiana ..	18-8-62
34	Pearl Woollen Mills Workers Union, Ludhiana ..	21-8-62
35	Ludhiana Knitting Wool Processers Merchants Society, Ludhiana ..	21-8-62
36	Ludhiana Hosiery Small Scale Union, Ludhiana ..	16-10-62
37	Hand Knitting Wool Processers Welfare Society, Ludhiana ..	19-10-62
38	Shakki Mazdoor Union, Ludhiana ..	3-11-62
39	Hosiery Industry Federation, Ludhiana ..	14-11-62
40	Interlock Cloth and Banyan Manufacturers Association, Ludhiana .	28-1-63
41	Ludhiana Cycle Parts Suppliers Association, Ludhiana ..	1-4-63
42	Cycle Mazdoor Sangh, Ludhiana ..	11-4-63
43	National Transport Workers Union, Ludhiana ..	11-4-63
44	Municipal Subordinate Services Union, Jagraon ..	18-5-63
45	Metal Mazdoor Sangh, Ludhiana ..	1-6-63
46	Dyeing and Finishing Workers Union, Ludhiana ..	12-6-63
47	Ludhiana Electroplaters Association, Ludhiana ..	30-7-63
48	Banyan Manufacturers Association, Ludhiana ..	16-8-63
49	Ludhiana Textile Mazdoor Union, Ludhiana ..	5-10-63
50	Woollen Mills Workers Association, Ludhiana ..	4-11-63
51	Supreme Karamchari Union, Ludhiana ..	8-11-63
52	Municipal Sweepers Union, Ludhiana ..	15-11-63
53	National Saw Mills Mazdoor Union, Ludhiana ..	26-12-63
54	District Engineering Workers Union, Ludhiana ..	20-1-64
55	Hosiery Mazdoor Sangh, Ludhiana ..	12-2-64
56	Railway Porters Sangh, Ludhiana ..	14-3-64

Serial No.	Name of the Union	Date of registration
57	Trade Employees Union, Ludhiana ..	20-4-64
58	Press Workers Union, Ludhiana ..	12-8-64
59	Krishana Roller and Flour Mills Workers Union, Ludhiana ..	13-5-65
60	Municipal Employees Union, Ludhiana ..	16-5-65
61	Textile Master Association, Ludhiana ..	21-5-66
62	Dyeing Factories Association, Ludhiana ..	2-6-66
63	National Trade Company Workers Union, Ludhiana ..	9-6-66
64	Municipal Workers Union, Ludhiana ..	4-10-66
65	Ludhiana Co-operative Store Employees Union, Ludhiana ..	13-12-66
66	Bank of India Employees Union, Punjab State, Ludhiana ..	20-12-66

CHAPTER XVIII

PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE ORGANISATIONS

(a) Representation of the District in the State and the Union Legislatures

The First General Elections, 1952.—Immediately after Independence of the country in 1947 the foremost task for the coalition Government, then in power, was to take necessary steps for the framing of a new Constitution for the proposed Republic of India. A Constitution Committee was accordingly formed for the purpose. The Constitution of India was finally approved by the end of 1949. This was enforced with effect from January, 26, 1950 and clearly defined the duties, rights and obligations of the people. The cardinal point, however, was for the Government to seek the verdict and enjoy the confidence of the people through general elections. The existing election rules had been framed by the British rulers whereby barely 13 per cent of the total population were eligible for franchise. The number of voters was restricted by laying down the stipulations of literacy, etc. Under the new Constitution every adult of 21, male or female, was entitled to vote barring those who were otherwise disqualified under the Constitution of India. The adult universal franchise afforded equal opportunity to the illiterate persons—the right rarely enjoyed in many underdeveloped countries. After making necessary arrangements for conducting elections, the Government of India announced the holding of the First General Elections early in 1952.

The task of conducting the First General Elections in 1951-52 was of unprecedented magnitude and complexity. The influx of refugees from Pakistan coupled with the extension of the franchise from 13 per cent to 50 per cent of the population required the preparation of new electoral rolls in very limited time ; delimitation of constituencies had to be undertaken afresh. No less than 7,000 polling stations had to be set up as against 1,300 in 1946 ; and thousands of subordinate staff had to be initiated into the new and complicated election procedure. The experience of general elections in 1951-52 revealed several shortcomings of the gigantic exercise and laid the foundation that proved exceedingly useful in subsequent elections.

In the General Elections of 1952, out of a total population of 8,08,105 (1951 Census) in the district, 4,69,207 persons were eligible for franchise. There

was a double member Parliamentary constituency of Ferozepur-Ludhiana. The details of the consituency are as follows:—

Name of Constituency	Extent of Constituency	No. of seats	No. of electors	Total No. of votes	Total No of votes polled	Percentage
1	2	3	4	5	6	7
Ferozepore-Ludhiana Double-Member Constituency	Zira and Moga Tahsils, Ferozepore tahsil (excluding Nathana thana) and Muktsar (excluding Kot Bhai thana and Bhagsar zail of Muktsar thana) of Ferozepore district and Ludhiana district (excluding Samrala tahsil and Sahnewal thana of Ludhiana tahsil) but including Sahnewal zail of Sahnewal thana).	2	7,64,171	15,28,342	8,11,733	53.11

Both the legislators returned for the Lok Sabha were Akali Dal candidates. The number of votes polled by each of the contesting parties was as follows :—

सत्यमेव जयते

Name of Party	No. of valid votes	Percentage of total valid votes polled in the district
1	2	3
Akali Dal ..	3,03,274	37·4
Congress ..	2,83,870	34·7
Independent ..	1,08,532	13·4
Scheduled Caste Federation ..	1,16,057	14·5
Total ..	8,11,733	100

For the Punjab Vidhan Sabha, there were 6 constituencies consisting of 8 seats in the district. The details of the constituencies were as follows :—

Name of Constituency	Extent of Constituency	No. of seats	Total No of electors	Total No. of votes	No of valid votes polled	Percentage
1	2	3	4	5	6	7
Samrala	Samrala Tahsil and Sahnewal thana (excluding Sahnewal zail) of Ludhiana tahsil	2	2,08,114	2,08,114	1,18,273	56·83
Ludhiana City North	Wards No. 1 to 5 of Ludhiana City and Mangat and Khasi Kalan Zails and Ludhiana Zail (excluding Jawahar, Nagar camp, Model Town and the village of Taraf Gahliwal, Taraf Karabara Taraf Nur Bhani, Taraf Piru Banda and Burra of Ludhiana Sadar thana of Ludhiana tahsil	1	51,868	51,868	26,116	50·35
Ludhiana City South	Wards No. 6 to 13 of Ludhiana city and Jawahar Nagar camp and Model Town and villages of Taraf Gahliwal, Taraf Karabara, Taraf Nur Bhani, Taraf Piru Banda of Ludhiana Zail of Ludhiana Sadar thana of Ludhiana tahsil	1	57,582	57,582	27,865	48.38
Jagraon	Jagraon tahsil ..	2	2,24,122	2,24,122	1,26,477	56.44
Ludhiana Sadar	Nurpur Bet, Baddowal, .. Dhandra, Lalton, Sahnewal Zail of Sahnewal thana Kalan, Gill and Dhandari Kalan Zails of Ludhiana Sadar Thana and Shankar and Hans Zails of Dehlon thana (excluding Shankar and Hans Zails of Ludhiana tahsil)	1	60,190	60,190	33,614	55·84
Dehlon	Pakhowal and Andlu Zails .. of Raikot thana and Dehlon thana (excluding Shankar and Hans Zails of Ludhiana tahsils)	1	56,975	56,975	34,459	60.48

सत्यमेव जयते

5 Akali Dal 2 Congress and 1 Independent candidates, were returned from constituencies of the district.

The number of the votes polled by each of the contesting parties was as follows :—

Name of the Party	No. of valid votes polled	Percentage of votes polled in the district
1	2	3
Akali Dal ..	1,24,974	34·5
Communist ..	15,767	4·2
Congress ..	81,295	22·2
Forward Block ..	19,151	5·2
Independent ..	81,446	22·2
Jan Sangh ..	10,866	2·8
Scheduled Caste Federation ..	22,770	6·1
Socialist ..	10,535	2·8
Total ..	3,66,804	100

सत्यमेव जयते

The Second General Elections, 1957.—Certain significant changes were effected in the elections law and procedure in 1957 in the light of the experience of the First General Elections. The election law was simplified for the facility of public and the candidates. The rules for the registration of names in electoral rolls were made more liberal. Provision was added enabling candidates to retire even after the withdrawal of candidatures. Polling was speeded up and the total period was reduced considerably, although the area involved was larger and covered both pre-merger Punjab and erstwhile Pepsu. For the first time arrangements were made for the poll to be held in the snow bound regions of Lahaul and Spiti. Different constituencies completed the poll in one day or in very few cases it lasted for 2 days. Votes were counted and the results declared as soon as the poll was completed in a constituency and counting was not deferred until poll in the entire state had been completed. Counting itself was done more speedily and in majority of cases it was completed in a single day.

During the general elections of 1957 there were 2 parliamentary constituencies in the district and the details of these are given as follows :—

Name of Constituency	Extent of Constituency	Total No. of seats	Total No. of electors	Total No. of votes	Total No. of valid votes polled	Percentage
1	2	3	4	5	6	7
Ludhiana	Ludhiana district, Moga and Zira tahsils and Ghalkhurd thana and Malawala part thana in Ferozepore tahsil of Ferozepore district and Faridkot Kanungo circle and patwar circle Nos. 1 to 9 and 16 in Kot Kapura Kanungo circle in Faridkot tahsil of Bhatinda district.	2	8,07,145	16,14,290	9,33,918	57·8

Congress candidates were returned to the Lok Sabha from both these constituencies.

The number of votes polled by each of the contesting parties was as follows :—

सत्यमेव जयते

Name of Party		No. of vaild votes polled	Percentage of total valid votes polled in the district
1		2	3
Communist	..	2,74,650	24·2
Congress	..	4,81,918	42·5
Independent	..	1,77,350	33·3
Total	..	9,33 918	100

The following table gives the position of the assembly seats in the district :—

Name of Constituency	Extent of Constituency	No. of seats	Total No. of electors	Total No of votes	Total No. of votes polled	Percentage
1	2	3	4	5	6	7
Samrala	Samrala tahsil and Sahnewal thana (excluding Sahnewal and Matterwara zails) in Ludhiana tahsil	2	1,12,227	2,24,454	1,28,062	57·5
Ludhiana City	Wards No. 1 to 20 of Ludhiana Municipality	1	48,154	48,154	34,485	71·62
Ludhiana North	Ludhiana Sadar thana (excluding Dhandari, Gill, Dhandara and Lalton Kalan Zails and Ludhiana City thana,) excluding Wards No. 1—20 of Ludhiana Municipality and Matterwala zail in Sahnewal thana, in Ludhiana tahsil	1	60,622	60,622	38,024	62·72
Ludhiana South	Sahnewal Zail in Sahnewal thana, Dhandari, Gill, Dhandara and Lalton Kalan Zails, in Ludhiana Sadar thana, Shankar, Hans, Malaudh, Pakhoke and Bir-Khurd Zails in Ludhiana tahsil	1	63,224	63,224	32,733	51.77
Raikot	Jagraon tahsil (excluding .. Jagraon thana), Raikot part-thana, Dakha part-thana and Dehlon thana (excluding Shankar, Hans, Malaudh, Pakhoke and Ber Khurd Zails) in Ludhiana tahsil	2	1,21,707	2,43,414	1,39,472	57·3
Jagraon	Jagraon thana in Jagraon	1	54,454	54,454	38,158	70·07

For these 8 Assembly constituencies, 7 congress and 1 Jan Sangh candidates were returned.

The number of the votes polled by each of the contesting parties was as under :

Name of the Party		No. of votes polled	Percentage of total votes polled in the district
1		2	3
Communists	..	60,284	14·6
Congress	..	2,08,845	50·8
Independents	..	55,305	13·5
Jan Sangh	..	26,184	6·4
Praja Socialist Party	..	12,207	3·00
Scheduled Castes	..	48,109	11·7
Total	..	4,10,934	100

The Third General Elections, 1962.—A major improvement in the matter of elections in the State this time was in regard to the period of poll. While it took nearly 19 days to complete the poll during the Second General Elections, the poll this time was held and completed on a single day, i.e. on the 24th February, 1962, throughout the State except in Kulu and Seraj constituencies where, on account of the areas being snow-bound and inaccessible, the poll was deferred and held towards the end of April. Punjab was the only State which had the distinction of having a single day poll both for the Parliamentary and Assembly elections. The counting of votes in regard to 152 constituencies was started on the 25th of February and completed by 28th February, 1962.

The Second General Elections were held on the ballot system of voting which meant completely closed compartments, one for the Parliamentary election and another for the Assembly election, and an array of ballot boxes in each of them equal to the number of contesting candidates. The old balloting system was retained only in the remote and inaccessible Kulu and Seraj constituencies. In all other constituencies in the State, the device which is called "Marking System" was adopted. Under the marking system the voter was given two ballot papers, one (pink) for the Assembly and the other (white) for the Parliamentary elections. Each ballot paper bore the names of the contesting candidate and fascimile of the symbol attached to each of them. Unlike the Second General Elections, for which a common type of ballot paper was adopted, the ballot paper in the Third General Elections varied in size as well as in contents from constituency to constituency according to the number of contesting candidates. The expenditure incurred by Government on conducting the Third General Elections was reduced and was approximately paise 13 per voter as compared to expenditure of paise 27 per voter during the Second General Elections, 1957.

The details of parlimentary constituency are as follows :—

Name of Constituency	Extent of Constituency	No. of seats	No. of electors	Total No. of votes	Total No. of votes polled	Percentage
1	2	3	4	5	6	7
Ludhiana	Sidhwan Bet, Raikot Ludhiana South, Ludhiana City, Ludhiana North, Khanna, Samrala	1	4,80,460	4,80,460	3,28,096	68.29

The Akali candidate was returned from Ludhiana Constituency. The number of votes polled by each of the contesting parties was as under :

Name of the Party		Total No. of valid votes polled	Percentage of total valid votes polled in the district
1		2	3
Akali Dal	..	1,10,386	34·7
Communists	..	60,318	18·9
Congress	..	1,08,516	34·0
Independent	..	11,521	3·6
Jan Sangh	..	24,771	7·4
Ram Rajya Parishad	..	3,199	1·4
Total	..	3,18,711	100

The details of the assembly seats in the district are as under :

Name of the Constituency	Extent of Constituency	No. of seats	Total No. of electors	Total No. of votes	No. of valid votes polled	Percentage
1	23	3	4	5	5	7
Jagraon	Jagraon thana in Jagraon tahsil	1	64,790	64,790	44,884	69·28
Sidhwan Bet (S.C.)	Sidhwan Bet thana Dhaka part-thana and Akalgarh zail in Raikot part-thana in Jagraon tahsil, Dhaka part-thana in Ludhiana tahsil	1	63,883	63,883	38,298	59·95
Raikot	Raikot part-thana (excluding Akalgarh zail) in Jagraon tahsil, Raikot part-thana and Dehlon thana (excluding Shankar, Hans, Malaudh Pakhoke and Ber Khurd zails) in Ludhiana tahsil of Ludhiana district and Bahadurgarh village in Malerkotla tahsil of Sangrur district	1	73403	73,403	38,647	66.27

1	2	3	4	5	6	7
Ludhiana South	Sahnewal zail in Sahnewal thana Dhandari, Gil, Dhandara and Lalton Kalan zails in Ludhiana Sadar thana, Shankar, Hans, Malaudh, Pakhoke and Ber Khurd zails in Dehlon thana in Ludhiana tahsil	1	73,309	73,309	50,236	68·53
Ludhiana City	Wards No. 1—20 of Ludhiana Municipality	1	49,755	49,755	39,939	80·27
Ludhiana North	Ludhiana Sadar thana (excluding Dhandari, Gil, Dhandara and Lalton Kalan zails) and Ludhiana city thana (excluding wards Nos. 1-2 of Ludhiana municipality) and Mattewala zail in Sahnewal thana in Ludhiana tahsil	1	89,953	89,953	61,352	68·20
Khanna (S.C.)	Khanna thana and Nagra zail in Samrala thana in Samrala tahsil	1	62,869	62,869	41,704	66·33
Samrala	Samrala tahsil (excluding Khanna thana and Nagra zails in Samrala thana) and Sahnewal thana (excluding Sahnewal and Mattewala zails) in Ludhiana tahsil	1	67,288	67,288	48,021	71·37

For the eight assembly constituencies, 4 Akali, 3 Congress and 1 Independent candidates were returned.

The votes polled in favour of each party contesting the election are given below :

Name of the party	No. of votes polled	Percentage of the total votes polled in the district
1	2	3
Akali Dal ..	1,25,624	34.9
Communists ..	20,276	5.6
Congress ..	1,42,632	39.7
Independent ..	41,099	11.4
Jan Sangh ..	26,066	7.4
Republican ..	4,320	·0
Swat antra ..	481	·1
	3,60,948	100

Nine M.L.Cs were elected/nominated from Ludhiana District during the years 1952 to 1966.

The Fourth General Elections. 1967.—Like the Third General Elections the poll throughout the State was held on a single day on February 19th, 1967. The counting was started on 21st February and completed on 24th February.

As in the Third General Elections the Fourth General Elections were also held under the marking system of voting. The voter was given two ballot papers, one (pink) for the Assembly and the other (white), for Parliamentary election, which bore the names of the contesting candidates and the facsimile of symbol allotted to each of them. The size of ballot paper varied from constituency to constituency according to the number of contesting candidates. Despite the fact that there has been abnormal increase in the price of election material, higher salaries of the employees and enhanced travelling and daily allowances the expenditure per voter was reduced to 12 paise as against 13 paise in the Third General Elections.

The details of parliamentary constituency are as follows :—

Name of Constituency	Extent of Constituency	No. of seats	No. of electors	Total No. of votes	Total No. of votes polled	Percentage
1	2	3	4	5	6	7
Ludhiana	Jagraon, Raikot, Qila Raipur, Dakha, Ludhiana North, Ludhiana South, Kum Kalan and Payal	1	5,19,908	5,19,908	3,62,471	67.93

The Congress candidate was returned from Ludhiana constituency.

The number of votes polled by each of the contesting parties was as under :

Name of the Party	Total No. of valid votes polled	Percentage of total votes polled in the district
1	2	3
Akali Dal ..	1,19,586	33.0
Akali Dal (Master Tara Singh Group) ..	28,238	8.0
Congress ..	1,32,660	36.0
Independents ..	11,079	3.5
Jan Sangh ..	63,088	17.4
Republicans ..	7,820	2.1
Total ..	3,62,417	100

The details of the assembly seats in the district are as under :

Name of Constituency	Extent of Constituency	No. of seats	Total No. Of electors	Total No. of votes	Total No. of valid votes polled	Percentage
1	2	3	4	5	6	7
Jagraon	Jagraon Municipality, Jagraon and Swaddi Khas K.Cs. in Jagraon tahsil	1	66,109	66,109	47,124	70.35
Raikot	Manoki K.C. (exluding any part of Jagraon Municipality) and Raikot K.C. (excluding any part of Jagraon Municipality and P.Cs. Bopa Rai Kalan, Hissowal, Raqba Mahi, Jangpur, Khandur, Sahauli, Abuwal and Tusa) in Jagraon Tahsil	1	66,772	66,772	47,173	69.97
Qila Raipur	Raipur and Pakhowal K.Cs. in Ludhiana Tahsil and P.Cs. Bopa Rai Kalan, Hissowal Raqba Mahi, Jangpur, Khandur, Sahauli, Abuwal and Tusa in Raikot K.C. in Jagraon Tahsil	1	70,513	70,513	47,333	66.31
Dakha (S.C.)	Dakha K.C. and Gil K.C. (exluding any area of Ludhiana Municipality) and P.Cs. Jassian, Sunet and Dughri in Ludhiana in K. C. in Ludhiana Tahsil	1	60,917	60,917	38,177	61 ·47
Ludhiana (North)	Wards 1 to 17, 19, 33 and 36 in Ludhiana Municipality	1	60,105	60,105	43,947	72.42
Ludhiana (South)	Wards 18, 20, 24, 26 to 32 34 and 35 in Ludhiana Municipality	1	54,494	54,494	37,858	68.60
Kum Kalan	Wards 21, 22, 23, 25, 37, and 38 in Ludhiana Municipality Ludhiana K.C. (excluding P.Cs. Jassian, Sunet and Dughri) Kum Kalan, K.C. and P.C.s. Rampur and Begowal in Payal K.C. in Ludhiana Tahsil	1	75,701	75,701	72,055	67.60
Payal	Payal K.C. (excluding P.Cs. Rampur and Begowal) and Malaudh and Jarg K.Cs in Ludhiana Tahsil	1	65,297	65,297	47,325	71.61
Khanna (S.C)	Khanna Kalan and Khamaon Kalan K.Cs. in Samrala Tahsil	1	60,605	60,605	40,673	65.50
Samrala	Samrala and Machiwara K.Cs. in Samrala Tahsil	1	69,408	69,408	53,026	75.77

For the Vidhan Sabha constituencies 4 Congress, 3 Akali Dal (Sant Group), 2 Jan Sangh and 1 Republican candidates were returned.

The votes polled in the favour of each party contesting the election are given below :

Name of the Party	No. of votes polled	Percentage
1	2	3
Akali Dal (Sant Group) ..	1,44,629	31.2
Akali Dal (Master Tara Singh Group) ..	30,367	7.1
Congress ..	1,73,801	38.4
Communist Party of India ..	3,413	1.0
Communist Party of India (Marxist) ..	3,037	1.0
Independents ..	36,361	8.1
Jan Sangh ..	40,822	8.0
Praja Socialist Party ..	2,235	0.4
Samyukta Socialist Party ..	697	0.1
Swatantra ..	920	0.2
Total ..	4,54,491	100

(b) **Political Parties and Organisations** : There is no party of purely local standing in the district, The following all India Political parties/ organisations, however, exist in the district :—

1. **The Shromani Akali Dal.**—The Shromani Akali Dal was formed originally in the State for the proper control and management of the Gurudwaras, which had earlier been treated as the private property of Mahants and suffered from all sorts of abuses. In due course of time the religious body assumed a political role as a representative body of the Sikhs. The Dal had played an important part in the freedom struggle in collaboration with the Indian National Congress.

The Shromani Akali Dal as a religio-political party enjoys considerable influence in the district especially among agriculturists and displaced Sikhs from West Pakistan. It is now a better organised party as compared to other political parties. It was formed in the district in 1921.

सत्यमेव जयते

In the First General Elections (1952), the Dal captured both the Lok Sabha seats. Out of eight members of Vidhan Sabha, five Akali candidates were elected. The party did not separately contest the Second General Elections (1957) because the Dal had entered into a political alliance with the Congress. In the Third General Election held in 1962, the Dal captured the Lok Sabha seat. Out of eight Vidhan Sabha seats, it bagged four seats. In the Fourth General Elections held in 1967, the Dal (Sant Group) bagged three Vidhan Sabha seats.

The Akali Dal obtained 3,03,274 votes out of the total of 8,11,733 votes polled for the Lok Sabha and got 1,24,974 votes for Vidhan Sabha out of 3,66,804 in the First General Elections. In the Third General Elections (1962) the Dal got 1,10,386 votes out of total of 3,18, 711 votes polled for the Lok Sabha and 1,25,624 out of 3,60,948 polled for the Vidhan Sabha. In the Fourth General Elections (1967) the Dal contested election on two fronts, *viz.*, Sant Group and A.D.M. (Akali Dal Master Group). The Dal (Sant Group) got 1,19,586 and A.D.M. got 28,238 against 3,62,471 votes polled for Lok Sabha. For Vidhan Sabha the Dal (Sant Group) got 1,44,629 and A. D. M. 30,367 against 4,54,691 votes polled.

2. The Communist Party of India.—The district unit of the all-India party was established in 1934. The Communist party was split up after the Chinese Aggression into two groups : the Communist party of India (Right Wing) and Communist Party of India (Left Wing). The former group condemned the Chinese aggression of 1962, whereas the latter did not recognise it as an aggression.

At the district level, there is a single wing incharge of urban and rural areas. Endowed with seasoned leadership, the party enjoys influence among labourers and poorer sections of the *Bet* areas. Neither in the Lok Sabha nor in the Vidhan Sabha any seat was captured in the district by the party in the First, Second, Third and Fourth General Elections.

The Communist Party did not contest the Lok Sabha seat and got 15,767 votes against 3,66,804 total votes for the Vidhan Sabha seat in the First General, Elections in 1952. In the Second General Elections, the party obtained 2,74,650 votes in the contest for the Lok Sabha seat against the total of 9,33,918 and 60,284 for the Vidhan Sabha seat against 4,10,934 total votes polled. Similarly in the Third General Elections, the party got 60,318 votes for the Lok Sabha seat and 20,276 for the Vidhan Sabha seat out of the total number of votes polled in the district. The party did not contest the Lok Sabha seat in the Fourth General Elections . For the Vidhan Sabha the party (C.P.I.) got 3,413 and (C.P.I.(M)) 3,037 against 4,54,691 votes polled.

3. **The Indian National Congress**.—This party has great influence among the Harijans, educated Hindus and Sikhs and is popular in both urban and rural areas. Being a National Party with national outlook, it has an appeal and tradition. Its economic policies of socialistic pattern of society, however, have a powerful appeal for labour classes as well.

In the First General Elections (1952), the Congress lost both the Lok Sabha seats. In the Vidhan Sabha, out of eight seats the Congress captured only two. In the Second General Elections (1957), the Congress candidates were elected from both the Lok Sabha seats. In the Vidhan Sabha, out of eight seats, the Congress captured seven seats. In the Third General Elections (1962) the Congress lost the only Lok Sabha seat. Out of the eigth Vidhan Sabha members, three Congress candidates were elected. In the First General Elections the Congress got 2,83,870 votes out of the total of 8,11,733 votes polled for the Lok Sabha seats. For the Vidhan Sabha seats the Congress score was 81,295 against the total votes polled numbering 3,66,904. In the Second General Elections, the party got 4,81,918 votes against the total of 9,33,918 votes polled for the Lok Sabha and 2,08,845 against the total votes of 9,10,934 polled for the Vidhan Sabha. Similarly in the Third General Elections (1962) the party got 1,08,516 votes against 3,18,711 votes polled for the Lok Sabha and 1,42,632 against 3,60,948 votes polled for the Vidhan Sabha. In the Fourth General Elections (1967) the party got 1,32,660 against 3,62,471 votes polled for Lok Sabha and 1,73,801 against 4,54,691 votes polled for the Vidhan Sabha.

4. **The Jan Sangh.**—The Jan Sangh was formed in the district in 1951. The party stands for maintenance of Indian tradition, culture and heritage and mainly derives inspiration from ancient Indian History. Presently, the party commands support among urban sections, especially in Ludhiana city. It has also some hold on Hindu population in other towns in the district. As yet, its influence is negligible in rural areas of the district.

Only one Jan Sangh candidate was elected in the Second General Elections of 1957 for the Vidhan Sabha. No candidate was elected for the Lok Sabha or the Vidhan Sabha in the First and the Third General Elections. The Jan Sangh party got 10,866 votes out of the total of 3,66,804 votes polled for the Vidhan Sabha in the First General Elections. In the Second General Elections, the party got 26,184 votes aginst 4,10,934 for the Vidhan Sabha. The party did not contest the Lok Sabha seat. In the Third General Elections, the party got 24,771 votes against 3,18,711 polled for the Lok Sabha and 26,066 out of the total of 3,60,948 votes polled for the Vidhan Sabha. In the Fourth General Elections (1967) the party got 63,088 votes against 3,62,471 votes polled and for Vidhan Sabha the party got 40,822 votes against 4,54,691 votes polled.

5. **The Republican Party.**—As a successor of the Scheduled Castes Federation of India, the party was formed in the district in 1956. The Republican Party carries some influence amongst Harijans. The distinguishing feature of the new party is that the membership of the parent organisation was open only to Harijans, whereas that of the Republican Party of India is open to all interested persons. The party contested only one Vidhan Sabha seat in the Third General Eldctions in 1962 for Samrala constituency and its candidate got only 4,320 votes. In the Fourth General Elections (1967) the party won a Vidhan Sabha seat. The party got 7,820 votes against 3,62,471 votes polled for Lok Sabha and 18,409 agaisnt 4,54,691 votes polled for Vidhan Sabha.

6. **The Swatantra Party.**—At all-India level the party was formally inaugurated at a preparatory convention in Bombay in 1959 and its first convention was held in March, 1960. The party could thus participate in the Third General Elections. The party did not contest the Lok Sabha seat. It only contested one out of eight Vidhan Sabha seats, viz., Sidhwan Bet seat and its candidate lost and got only 481 votes. In the Fourth General Elections (1967) the party got only 920 votes against 4,54,691 votes polled for Vidhan Sabha.

7. **The Socialist/Praja Socialist Party.**—Before 1947, the socialists formed a separate wing of Congress Party. It was essential for a member of Congress Socialist group to become a formal member of Congress. The socialist section separated from the main body of the Congress in 1948 and was organised in the district as a separate party in that very year. In 1954, the Socialist Party merged with Kisan Mazdoor Praja Party with the new nomenclature of Praja Socialist Party. It was split up into two groups-Praja Socialist and Socialist. In 1955, both the wings merged under the new name of 'Samukat Socialist Party'. Immediately afterwards, it was again split up into Praja Socialist Party and Socialist Party.

It has no particular hold on any section of people. The party could not capture any seat in any General Elections so far. In the Second General Elections (1957), the party contested Samrala constituency seat and its candidate got only 12,207 votes. The party did not contest the Third General Elections. In the Fourth General Elections Praja Socialist Party got 2,235 votes and Samukat Socialist Party 697 votes only against 4,54,691 votes polled for Vidhan Sabha.

(c) **Newspapers Papers published in the district and their importance.**—The particulars in respect of Newspapers and periodicals published in the district as on 1st April, 1966 are given in the following statement [1].

1. The details of magazines/bulletins issued by schools, colleges, professional institutes and Agricultural University, Ludhiana, have been excluded as these have a very limited circulation and also limited scope of study.

Statement showing the Newspapers and Periodicals published/in existence in the Ludhiana District as on 31st March, 1966.

Serial No.	Particulars/name of the newspapers	Name of the Printer and address	Name of the Editor	Policy	Language
1	2	3	4	5	6
1	Alochana ..	Prof. Parminder Singh, M.A. 168, Model Gram, Ludhiana	Shri Pritam Singh	Literary	Punjabi
2	Aggarwal Patrika ..	Shri Mul Raj Jain, B VI-889, Gulchaman Gali, Ludhiana	Aggarwal Sabha	Sectarian	Hindi-Punjabi
3	Agitator ..	Shri Iqbal Krishan Sharma, B III, 257, Mohalla Vakilan, Purana Bazar, Ludhiana	Shri Iqbal Krishan Sharma	News and current affairs	Urdu
4	Adarsh Punjab ..	Shri Kali Charan Sharma, Ghas Mandi, Ludhiana	Shri Kali Charan Sharma	Ditto	Urdu-Hindi
5	Bal Darbar ..	Shri Jiwan Singh, Chowk Ghanta Ghar, Ludhiana	Shri Hazara Singh	Children's Magazine	Punjabi
6	Bal Lila ..	Shri Jiwan Singh, M.A., College Road, Ludhiana	Shri Kanwal Nain	Ditto	Hindi
7	Bahar-e-Adab ..	Shri Trilok Singh Medhiratta, B-IV-470, Meena Bazar, Ludhiana	Shri Trilok Singh Medhiratta	Literary	Urdu
8	Changi Kheti ..	Dr. G.S. Bedi, Agricultural University, Ludhiana	Dr. G.S. Bedi	Agriculture	Punjabi
9	Dastkar ..	Shri J.B. Prashar, Ludhiana	Shri J. B. Prashar	Industry	English
10	Evening News ..	Shri R. Dhiman, Ludhiana	Shri R. Dhiman	News and current affairs	Urdu
11	Excelsior News ..	Shri Tarsem Chand Goel, Goel Bhawan, Ludhiana	Sh. Tarsem Chand Goel	Miscellaneous	English

1	2	3	4	5	6
12	Freedom Fighter ..	Shri Amar Chand Batta, Chaura Bazar, Ludhiana	Shri Amar Chand Batta	News and current affairs	Urdu
13	Gurmat Granthi Samachar	Shri Mehtab Singh, Ludhiana	Shri Mehtab Singh	Religion and Philosophy	Punjabi
14	Hoshiar ..	Shri Udey Chand Tishana, Purana Bazar, Ludhiana	Shri Udey Chand Tishana	News and current affairs	Urdu
15	Hakayat ..	Shri Gian Chand Gupta, B-VI-705, Moh. Rupa Mistri, Ludhiana	Shri Gian Chand Gupta	Ditto	Urdu
16	Harijan Sansar ..	53-Sahotra College, Shashi Mohalla, Ludhiana	..	Social Welfare	Urdu
17	Hosiery and Textile Journal	195-BXI, Kucha Mangat Rai, Ludhiana	..	Commerce and Industry	English
18	Here-in-Ludhiana ..	Christian Medical College, Ludhiana	..	Medicine & Health	English
19	Hindu Savdesh ..	Pt. Babu Ram Sharma, Miller Ganj, Ludhiana Gill Road	Pt. Babu Ram Sharma	News and current affairs	Urdu
20	Indian Times ..	Shri Balbir Singh Jaswal, Mohalla Madho Puri, Kucha 3, Ludhiana	Shri Tirath Singh	Ditto	Urdu
21	Insaf Ka Mukka ..	Shri Surinder Kumar Takhtar, B-III, 371, Mohalla Vakilan, Purana Bazar, Ludhiana	Shri Surinder Kumar	Ditto	Urdu
22	Indian Wool Market report	Mrs. Anupam, Civil Lines. Ludhiana, 699, Anupam	Shri D. S. Kumaria	Commerce and Industry	Urdu
23	Iudian News Index ..	Shri S.S. Lal, Punjab University Extension Library, Civil Lines, Ludhiana	Shri S.S.	News and views	
24	Kundan Jyoti ..	Kundan Lal, Kundan Vidya Mandir, Ludhiana Civil Lines	Shri Kundan Lal	News and current	English and Hindi
25	Krishak Samaj ..	Shri Pritam Singh, Opposite Minerva Talkies, Ludhiana	Shri Pritam Singh	Agricultural	Punjabi

1	2	3	4	5	6
26	Majdoor Savdesh ..	Shri Vas Dev Duggal, BIV-525, Brahm Puri, Ludhiana	Shri Vas Dev Duggal	Labour	Urdu
27	National Front ..	Shri Mohan Lal Senji, Near Lakar Bazar Ludhiana H.No. 7-133	Shri Mohal Lal Senji	News and current affairs	Urdu
28	Nazrana ..	Shri J.S. Sharma, 54 Ashok Nagar, Ludhiana	Shri J.S. Sharma	Ditto	Urdu
29	Nirbhai Yodha ..	Shri Balwant Singh Tej, 271-L, Model Town, Luahiana	Shri Balwant Singh Tej	Ditto	Punjabi
30	Nia Sama ..	Ram Singh, Bhadaur House, Ludhiana	Shri Ram Singh	Ditto	Punjabi
31	Paigam-e-Ayurved ..	Saine Pali Sharma, Laj Pat Road, Jagraon Mandi	Shri Saine Pali Sharma	Medical and Health	Urdu
32	Panjabi Rattan ..	Mohinder Singh Kalzara, Bhadaur House, Ludhiana	Shri Mohinder Singh Kalzara	News and current	Punjabi
33	Pau News ..	Dr. G.S. Bedi, Punjab Agricultural University, Ludhiana	Dr. G.S. Bedi	Agriculture	English
34	Parwaz ..	Shri Ram Sarup, New Book Shop, No. 2, Ludhiana	Shri Raj Sharma	Literary and Cultural	Urdu
35	People's Voice ..	Shri Madan Lal Prashar, Sleem Tabri, Ludhiana H. No. 310	Shri Madan Lal Prashar	News and current affairs	Urdu
36	Pharmacy News ..	Shri Amar Das Bhatia, Pindi Street, Ludhiana	Shri Amar Dass Bhatia	Medicine and Health	English
37	Pharmacy News (Hindi)	Ditto	Ditto	Ditto	Hindi
38	Pharmacy News (Punjabi)	Ditto	Ditto	Ditto	Punjabi
39	Pharmacy News (Urdu)	Ditto	Ditto	Ditto	Urdu
40	Progressive Farming ..	Dr. G.S. Bedi, Punjab Agricultural University, Ludhiana	Dr. G.S. Bedi	Agricultural	English

1	2	3	4	5	6
41	Prit Reet	S. Sajjan Singh, 24 Tagore Colony, Ludhiana	Shri Kanwal Singh Kalsi	News and current affairs	Punjabi
42	Punjab Times	Shri Om Parkash Sood, 5 Kucha Field Ganj, Ludhiana	Shri Om Parkash Sood	Ditto	English/Urdu
43	Punjab Trade and Industry	Shri G.S. Balhaya, 1221 Civil Lines, Ludhiana	Shri G.S. Balhaya	Commerce and Industry	English
44	Ram Ram	Shri Prem Chand Phakhar, B-V-2040 Samrala Road, Ludhiana	Shri Prem Chand Phakhar	News and current affairs	Urdu
45	Ractor Pharmacy Bulletin	Dr. Garbachan Singh, Gill Road, Ludhiana, B-12/1810/14, Tagore Colony	Dr. Gurbachan Singh	Medicine and Health	English/Punjabi
46	Sada-e-Waqt	Murari Lal Nirmal, Pansari Bazar, Ludhiana	Shri Murari Lal	News and current affairs	Urdu
47	Sadaquat	Shri Nand Singh Jandoo, Chaura Bazar, Ludhiana	Shri Babu Ram Sharma	Di tto	Urdu
48	Samaj	Shri T.R. Mohindra, Chowk Girja Ghar, Ludhiana	Shri T.R. Mohindra	Ditto	Urdu
49	Sahitya Samachar	Shri Jeewan Singh College Road, Civil Lines Ludhiana	Shri Jeewan Singh	Literary and Cultural	Punjabi
50	Samrat Jyoti	Shri Kuldip Raj Toofan, Gill Road, 41 Beri Market Ludhiana,	Shri Kuldip Raj Toofan	News and current affairs	Hindi
51	Sanati Mazdoor	Shri Sita Ram, B-1-1047 Mohalla Chakaursi Ludhiana,	Shri Sita Ram	Labour	Urdu
52	Sanman	Shri Kirpal Singh, B-XIII, 594 Karimpura, Ludhiana	Shri Kirpal Singh	Religion and Philosophy	Urdu
53.	Sarvdeshak Mazdoor	Shri Sohan Lal, Ashoka Calico Printing Works, Ludhiana	Shri Sohan Lal	Labour	Urdu
4	Sarvodya Sansar	Shri Ujjagar Singh Bilga, Gandhi Khadi Bhand ar, Ludhiana	Shri Ujjager Singh	Bhoodan Movement	Punjab

1	2	3	4	5	6
55	Shikwa ..	Shri Mehr Chand, 921, Basti Engine, Ludhiana	Shri Jaspal Singh	News and current affairs	Urdu
56	Shakti Punj ..	Shri Raj Kalia, 27 Ashok Nagar, Ludhiana	Shri Raj Kalia	Ditto	Hindi/Punjabi
57	Socialist Bharat ..	Shri Surinder Mohan Sudama, B-IV-710-Wait Ga nj, Ludhiana	Shri Madan Lal Prashar	Ditto	Urdu
58	Tarjman ..	Shri Amar Dass Bhatia, Pindi Gate, Ludhiana	Shri Amar Dass Bhatia	Ditto	Urdu
59	Talash-e-Haq ..	Shri Salmat Rai Sood, B-XIV Mohalla Ajit Nagar, Ludhiana	Shri Salamat Rai Sood	Ditto	Urdu
60	Temperance Magazine	Sh ri Gurdit Singh Sabha, B-XIII-527, Naya Moh. Ludhiana	Shri Gurdit Singh	Social Welfare	Hindi/Punjabi/ Urdu
61	Tigar ..	Shri Ajaib Singh Tung, Lajpat Rai Market, Ludhiana	Shri Ajaib Singh Tung	News and current affairs	Urdu
62	Tiranjan ..	Shri Niranjan Avtar, B-IX/769, Ludhiana	Shri Niranjan Avtar	Literary and Cultural	Punjabi
63	Unat Kheti ..	Shri G.S. Bedi, Punjab Agricultural University, Ludhiana	Shri G.S. Bedi	Agricultural	Hindi
64	Voice of Contractor ..	Shri Joginder Singh Pradhar, 36, Model Town, Ludhiana	Shri Joginder Singh Pradhar	News and current affairs	English/Urdu
65	Wattan Dost ..	Shri Joginder Singh Datt, H. No. BIX, 180, Gulchaman Gali Ludhiana	Shri R.K. Jain	Ditto	Urdu
66	Zeenat ..	Bawa Shayam Dass, H. No. 41, New Model Town, Ludhiana	Bawa Shayam Dass	Literary and Cultural	English/Hindi/ Urdu/Punjabi
67	Rohjan ..	Shri Krishan Kant, Opposite Minerva Talkies, G.T. Road, Ludhiana	Shri Priya Sharan	Ditto	Urdu
68	Rehnumai-Pan-Faroshan	Shri Devi Chand Sharma, Ludhiana	Shri Devi Chand Sharma	Ditto	Urdu
69	Industry age Digest ..	Shri Pritam Singh, G.T. Road, Ludhiana	Shri Pritam Singh	Ditto	English/Punjabi
70	Indian Geriatries ..	Not given (Ludhiana)	Not given	Ditto	English

Newpapers published outside Ludhiana District, which command fairly large circulation in the District

The following are the papers, journals, etc., published outside Ludhiana but in fairly large circulation in the district :—

Serial No.	Name	Language	Place of publication
		PAPERS	
1	Ajit	.. Punjabi	Jullundur City
2	Akali Patrika	.. Do	Do
3	Hind Samachar	.. Urdu	Do
4	Hindi Milap	.. Hindi	Do
5	Jathedar	.. Punjabi	Do
6	Milap	.. Urdu	Do
7	Prabhat	.. Do	Do
8	Pradeep	.. Do	Do
9	Pratap	.. Do	Do
10	Tribune	.. English	Chandigarh
11	Vir Pratap	.. Hindi	Jullundur City
		JOURNALS	
1	Biswin Sadi	.. Urdu	Delhi
2	Caravan	.. English	Do
3	Filmfare	.. English	Do
4	Kahani	.. Punjabi	Preet Nagar, Amritsar
5	Preet Lari	.. Punjabi	Ditto
6	Sarita	.. Hindi	Delhi
7	Shama	.. Urdu	Do

(d) VOLUNTARY SOCIAL SERVICE ORGANISATIONS

Organised Social Service at the State or community level is of recent orignin in the country. Social welfare, according to the age old tradition, was generally understood to be a form of charity indulged in by wealthy philanthroipists in the construction of Serais, digging of wells and opening of dispensaries for the sick and poor. Against the above background, scope for all such welfare activities remained extremely limited throughout the ancient and medieval periods. To a great entent the joint family and caste systems obviated need for social welfare organisations. The head of a joint family was expected to support all the members of the family. He looked after the individual needs of all the members of family whether they were weak or strong, sick or healthy, employed

or unemployed. Thus there was not much need for assistance from any other agency. Next to the joint-family, the caste system also promoted the welfare of the members of the caste who were treated like the members of a corporate body During the pre-British period, guilds of artisans also served as a means of social welfare of the members. Each received help whenever he needed it from the other members of his caste/guild. Above all, every village by itself was a compact unit which was governed by its own Panchayat. Under the old rural autonomy, little scope or necessity was left for the wholetime social workers or special organisations for social service. Further, life in those days was simple and human wants were not many. Such wholesome social conditions prevailed upto the advent of British rule in the Punjab. The establishment of the British system of centralised administration not only progressively reduced the traditional autonomy of the villages but also weakened the ties of social cohesion and left the people without any agency for social welfare. The establishment of Christian missions in the Ludhiana District as a sequal to British administration led to the starting of schools, orphanages and hospitals which paved the way for organised voluntary social work in India. Wealthy philanthropists who had all along directed their resources to the raising of conventional public utility works or religious institutions have contributed in considerable measure to the setting up of new social welfare agencies and institutions in the district. Some of the notable voluntary social service organisations in Ludhiana district have been briefly described in the following pages :—

Bhartiya Lachar Sevek Dal.—(All India Beggars and Lepers Welfare Association, Ludhiana). The institution, established in 1948, has organised "Home of Hopes" (Bal ghar), Karan Niketan (where children of over 12 years of age are trained in tailoring, khadi industries, etc.), and Leper's Colony. Karan Niketan was till recently run by the Bharat Sewak Samaj, but has been handed over to the Bhartiya Lachar Sevak Dal. The Lepers' colony in Ludhiana serves 134 adults.

The Leper's Colony in Ludhiana is situated in Prem Nagar to the far east of Ludhiana. Its president and secretary are well-educated lepers. The colony is electrified and has a few hand-pumps for drawing water. The houses are pucca. There is a dispensary in the colony. For the benefit of children of lepers, there is a school with the provision of games.

Bharat Sewak Samaj.—It was established in the district in 1951. It has about 400 active members. It is a non-political and non-official all-India Social Service Organisation. The Samaj devotes particular attention to the creation of spirit of voluntary service among the masses. Men and women who are willing to spare time for social service can become its members.

The Samaj renders active service at the time of floods and other emergencies, when articles of daily use are distributed free of charge amongst the needy. It also distributes foodstuffs among the indigent school going children.

District Soldiers' Sailor's and Airmen's Board, Ludhiana.—At Ludhiana the Board was formed in 1919 at the instance of Government of India. It has official and non-official members with the Deputy Commissioner as Chairman.

The Board assists the military personnel in respect of pension, relief, grants, scholarships, loss of discharge certificates, *jangi inam*, medals distribution, medical treatment, final settlement of accounts and other allied matters. Out of the Punjab Post War Services Reconstruction Fund stipends are granted to the children of the serving soldiers, ex-servicemen and deceased soldiers (excluding Junior Commissioned Officers.)

The Lion Club, Ludhiana.—It is another well known social welfare organisation. It was started in Ludhiana in 1963. Its moto is "we serve". Its main functions are to create mutual international understanding and to help the poor in distress. The Club has established a gymnasium at a cost of Rs. 4,000 It also presented Rs. 3,000 for the construction of waiting hall for the out-door. patients in the local Kapur Maternity Hospital. The centre of activities of the Club is Ludhiana proper. It has also presented Rs. 1.50 lakh to Daya Nand Hospital for the construction of an Eye Ward.

During the Indo-Pak Conflict, the Club ran a canteen at the Railway Station for one month. Arrangements were made for giving light refreshment to some 20,000 members of the Armed Forces. After the Conflict, the Club presented Rs. 100 per month for full one year to those twelve families whose only earning members had been killed in active service.

The club holds its meetings twice a month at the residence of a member by rotation or at the local Gulmohor Hotel. It has 52 members.

The Club also offers scholarships from Rs. 20 to Rs. 50 to five deserving students. The Club has recently constructed two bus stops in the city.

Red Cross Society.—The International Committee of the Red Cross was created in 1864 in Geneva. In 1919, a League of the Red Cross Societies was formed. This international body was recognised under an Act passed by Government of India (No. XV of 1920) as the Indian Red Cross Society. Afterwards its branches at State and District headquarters were established. Ludhiana District branch of the Indian Red Cross Society was established in 1930. The main functions of the Red Cross are to effect improvement of health, prevention of disease and mitigation of suffering. To achieve the humanitarian objects, the society has organised its activities in the various spheres : Service to Armed Forces ; Maternity

and Child Welfare ; Health Education and relief at national and international level at the time of calamities; First Aid, Home Nursing and Ambulance services through the St. John Ambulance Brigade acting as a wing of the society; Help and assistance to the junior Red Cross activities ; Blood transfusion Service—and training to doctors, Lady Health Visitors, Mid-wives, Nurses, Nurse-dais, Dais, etc. Like other districts, Ludhiana district enrols life members, annual members and annual associates of the Red Cross Society. The District Red Cross Society is also running Dispensaries, Welfare Centres and Maternity and Child Welfare Centres. Their number varies year to year according to the association and contribution of panchayats. The society also maintains a Blood Transfusion Service at the premises of Daya Nand Hospital, Ludhiana.

The societies also attend to the relief work even in normal circumstances. Rs. 6,560 were spent as 50 per cent share of the cost of sewing machines distributed to the dependents of the soldiers killed in the Indo-Pak. conflict of 1965. Rs. 1,859.15 were spent on providing relief to persons in distress besides giving 9 sewing-machines to poor widows.

The society is a member of the Film Circulating Library. Rs. 6,224.47 were remitted to the State Branch on account of its share of the collections made by the Branch during 1965.

In the event of armed conflict, floods and other natural calamities the Red Cross has a conspicuous role to play. The society hastens to aid the persons in distress.

Rotary Club, Ludhiana.—The Rotary Club—an International Community Service Organisation—was formed in Ludhiana in 1952. Its membership in 1965 was 50. Its main objects are to encourage and foster the ideal of service as a basis of the worthy enterprise, and in particular to foster acquaintance and opportunity for fellowship, the recognition of the worthiness of all useful occupations, application of ideal of service by every Rotarian to his personal, business and community life and advancement of international understanding, goodwill and peace through a world fellowship of business and professional men. Its members meet every Friday evening.

In Ludhiana the Club has taken steps for traffic safety by installing placards containing traffic instructions on important roads. It also supplies artificial limbs through Brown Memorial Hospital, free gas cylinders to three hospitals of the city. It also gives community awards and a few scholarships of Rs. 25 each per mensem to the deserving students of colleges at Ludhiana. The Club helps the crippled children through local maternity hospitals.

Shri Krishan Sewa Dal, Jagraon.—The Sewa Dal is a local social service organisation. It provides medical help to the disabled and needy. It

organises free -eye operation camps by inviting competent surgeons. Hundreds of patients are provided preliminary medical check-up and many are operated upon. The Dal provides free accommodation, food and medicines. It also arranges the recruitment of voluntary workers for catering to the needs of pilgrims at Hardwar and Kurukshetra or at other holy places on solar eclipses and other big festivals. It further acts as a liaison between the public and Government for redressing the grievances of the people.

The Dal has also installed a telephone at the local electricity office for the convenience of people of Jagraon town.

Sewa Samiti, Ludhiana.—Sewa Samiti was formed in the district in 1926. It is affiliated to All India Sewa Samiti. The Samiti elects its president every year. There is no subscription for membership.

The main functions of the Samiti are to render social service on important local fairs and festivals, such as Dussehra, Dandi Swami, Mahabharat Dharam Samailan, Ram Naumi and Gope Ashtami, etc. It also sends its 20—30 volunteers on eclipse to Kurukshetra; on Kumbhi and Kumbh to Hardwar and Paryag (Allahabad).

Thr Samiti helps in locating the parents of lost children. It also disposes of the unclaimed dead bodies as and when contingency arises. To meet the expenditure Samiti raises collections.

Besides there are Shastri Sewa Samiti, Radha Krishna Sewa Samiti, Krishan Dal and Janata Sewa Samiti. The main functions of these Samitis/ Dals are to raise 20—30 volunteers for special fairs/festivals. The Samitis/ Dals meet the requisite expenses by raising collections.

Punjab Mahabir Dal, Ludhiana.—Formed in Ludhiana about the twenties of the present century, the Mahabir Dal has about 150 members. Its president is elected every year. The Dal has its property at Ludhiana. It also raises collections to meet expenses. It is running an Ayurvedic dispensary in Saban Bazaar, which is manned by a Vaid, Dispenser and an Assistant. It also deputes 20—30 volunteers on the Dussehra and other *melas*.

Gurdwara Manji Sahib, Alamgir

CHAPTER XIX

PLACES OF INTEREST

(*a*) Introductory

Ludhiana, known as Lancaster of India, should not, however be considered to be important merely on account of its remarkable industrial and agricultural development. Its geographical situation, on the highway connecting Delhi with Central Asia, had made it note-worthy since early times. The district is famous for many ancient mounds, sites and remains, which go back to pre-historic period. The district has assumed considerable importance on account of its association with numerous historical land marks. Among the places of interest spread all over the district there are old towns, historic Gurudwaras, tombs of Saints and monuments of considerable antiquarian importance. Out of scores of such places selection of more outstanding ones has been made. Detailed description of these places of interest has been prepared to give a clear idea of their early beginnings and present condition. The district is well connected with both road and rail. To facilitate visits to all such places of great archaeological, historical and cultural significance, these have been grouped under the respective tahsils and have been arranged in the alphabetical order.

(b) Ludhiana Tahsil

Ludhiana tahsil of Ludhiana district, with an area of 1,449 Kilometres (1961), lies on the south bank of the Satluj between 30°—34′ and 31°—1′ North Latitude and 75°—36° and 76°—9′ East Longitude. Its population was 5,62,411 in 1961 as against 4,22,734 in 1951. The city of Ludhiana (population 2,44,032 in 1961) is also the tahsil headquarters. The tahsil includes 356 villages.

Alamgir.—The village is said to have been founded on an old abandoned site in the times of Emperor Aurangzeb. Since the original assignees had taken possession of the area with the permission of the Mughal Emperor it was named as Alamgir after him. It is about 13 kilometres to the south-west of Ludhiana on Ludhiana-Malerkotla road. It lies on 75°—51′—36″ Longitude and 30°—48′—36″ Latitude. The place has got a Government Middle School for Boys and a Government Girls Primary School. There is a Veterinary Hospital and a Sub-Health Centre. A Sub-Post Office is located in the Government Middle School. The village has a panchayat. Its population was 2,317 in 1961 as against 1,900 in 1951.

Alamgir is famous for the historical Gurdwara Manji Sahib. It is situated outside the village, about 11 kilometres from Ludhiana on the Malerkotla Road ; with which it is linked by an approach road about ½ kilometre length. Guru Gobind Singh is said to have been brought to this place disguised as Ucha Ka Pir on a *Manji* (cot), which was carried on shoulders of 5 supporters—2 Mohammadans and 3 Sikhs. During his brief halt the Guru asked for water from a woman passerby. She reported that there was no water at the mound ; but there was a well at a short distance. Unfortunately no body dared draw water from it on account of a big snake that lived close to it. The Guru shot an arrow, which killed the snake. One of the disciples sent there to bring water, informed the Guru that the water of the well had become polluted with the blood of the wounded snake, which had fallen in it. The Guru shot another arrow into the ground whereupon water sprang up there. Being convinced of the super-natural powers of the Guru the woman requested him to cure her of leprosy. The Guru assured her that all those who would bathe in the *Sarovar* with faith would be cured of leprosy. The woman obeyed the command and was fully cured. At the place where the Guru abandoned the *manji* (cot) the celebrated six-storeyed Gurdwara has been built at the total cost of about Rs 10 lakhs. 46 Bighas of land are attached to the Gurdwara. Annual expenditure on the maintenance of the Gurdwara comes to about Rs 1,10,000. Every year a Shahidi Jor Mela is held there from 28th to 30th December. The Gurdwara attracts large crowds on every Sunday. Mostly people come from Ludhiana and surrounding area. No less than 8,000 persons take free *Langer* at the Gurdwara which has the largest Langar hall, 130 ft.× 55 ft., in the State. About 1,500 people can take meals at a time and food is served in 5 shifts. To cope with the big rush of visitors on Sundays, bus service from Ludhiana is available at intervals for 10 minutes. On other days Government bus service is available twice daily. The Gurdwara is under the Shiromani Gurdwara Prabandhak Committee, but is managed by a local Committee with a large number of regular staff. The Gurdwara has been mainly built by public contribution.

Bhaini Sahib.—Bhaini Sahib or Bhaini Ala is situated at a distance of about 25 kilometres towards the east of Ludhiana, on Ludhiana-Chandigarh Road, with which it is connected by an approach road about 3 kilometres long. The village was originally known as such and came to be called Bhaini Sahib on account of its association with the founder of the Namdhari sect in keeping with practice of giving the suffix to all notable Sikh religious places. The origion of the name is given as follows in the revenue records of the district pertaining to the Bandobast of 1882 A.D. "On taking possession of the areas of the village, Bhunder, the earliest assignee, founded the village named Bhaini. The habitation was, however, deserted and the residents shifted to Bhaini Araian. Once again

Ala and Mana, descendants of Bhunder, reverted to old site about ninety-seven years ago and founded a new village at the place. The village was given the earlier name with the addition of Ala on account of the name of the founder. The village thus came to be known as Bhaini Ala". The village has a Government Primary School (Co-educational). A Branch Post Office (extra departmental) is also located in this school. A public library is maintained by the village Panchayat. A telephone connection has also been installed at the Dera. The population of the village was 740 in 1951 and 710 in 1961. It lies on 70°—04′—06″ longitude 31° —52′—20″ latitude. Bhaini Sahib is the Headquarters of Namdharis. Guru Ram Singh made the place the centre of his activities on shifting there from his birth place, Bhaini Araian, 2.5 kilometres away, onwards 13th April, 1857. Bhaini Sahib as the holy centre of the sect attracts the Namdharis from far and near. A number of land marks are connected with the various Namdhari gurus in succession.

For the first time the annual function was held by the Late Guru Partap Singh on 'Nirjala Ekadashi' at Bhaini Sahib in 1906 A.D. in the memory of Late Guru Hari Singh. After some time the date of this annual function was changed by Guru Partap Singh to Bhadra (1st fortnight) or September. From 24—26 Bhadra (September) a big *mela* is held there every year. The Guru blesses the followers and congregational marriages of Namdharis in a simple way without much expense are solemnised on the occasion. Some of the disciples have raised pucca structures at the site of the *mela* at their own expense. Once a year a gathering of Namdhari Youth studying in colleges is also held there. At the meeting they are exhorted not to forget their distinguishing characteristics and traditions.

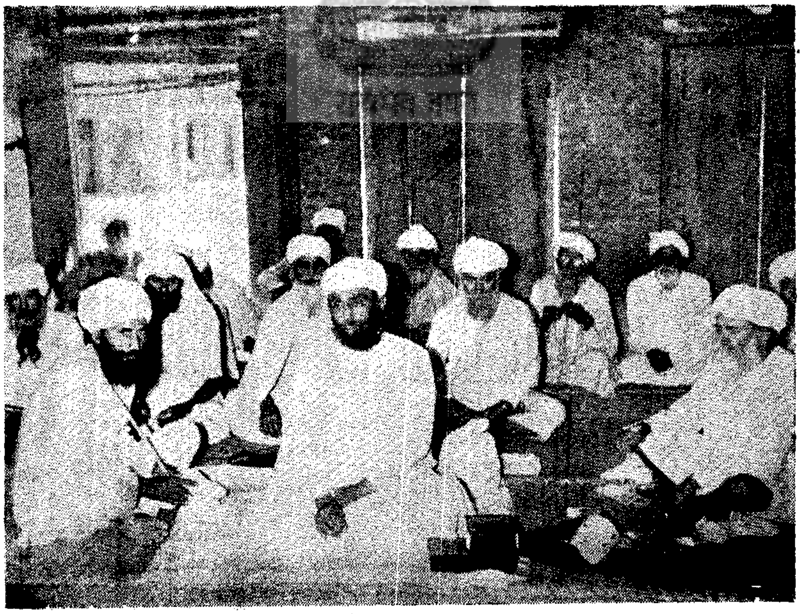
The following places at Bhaini Ala are specially venerated by the Namdharies :—

(1) **Thara.**—Harimander (raised platform) is a place where Guru Ram Singh is said to have prayed and performed religious ceremonies. In the morning *Asa Di War* is sung there. In the evening a lamp filled with ghee is lighted and one hour *Nam Simran* and *kirtan* are performed there.

(2) **Loh** (a big round iron pan).— designed and made by Guru Ram Singh is used for preparing Chapaties. However, only such persons as do not drink tap water are allowed to see it at close quarters. Others are allowed to look at it from a distance. The pan is used ordinarily as also at the time of a '*mela*' along with other pans. During '*melas*' a few *prashadas* (chapatis) are prepared on this pan, and, then these are mixed with those which are prepared on the other pans.

(3) **Ram Sar** (*Sarowar*).—This tank was dug under the orders of Late Guru Hari Singh. It is believed that those who bathe in it, get rid of their

Satsang Ghar at Bhaini.



Namdharis Holding Satsang.

bodily ailments. The water is also considered beneficial for children suffering from rickets and may be served with spoons. It is proposed to make the enclosure of the *sarowar* pucca. For the present only the stairs leading to the water have been constructed with burnt bricks.

(4) **Diwan-wala Makan or Mandir.**—Free *langar* has been organised at the place from 1849 A.D. and is being run uninterruptedly. It is open to all irrespective of caste and creed for 24 hours.

(5) **Akalbunga.**—Situated outside the village is the place where Guru Ram Singh used to perform his worship alone. The well situated near this place has also got great importance for the Namdhari Sikhs. The martyrs of Malerkotla gathered here and performed their *ardas* (Prayer) for departure to Malerkotla. They were said to a have been seen off here by Guru Ram Singh.

(6) **Gaddi Sahib.**—This *chubara* (upper storey) is the place where late Guru Hari Singh used to perform diwans, etc.

(7) **Havankund.**—Late Guru Partap Singh is said to have performed, 1,25,000 recitations of *Chandi Di War* to check the opening of a slaughter house in Lahore in 1938. Havan is usually performed here during the Bhadra *mela.*

(8) **Place of Prayer connected with Guru Pratap Singh.**—This small *Thara* (pucca Platform) was constructed by Guru Partap Singh and he used to perform his *jap proyog* (to sit for prayers after bathing a little after the midnight and continue upto about 1½ hours before dawn) every year during the monsoon. He used to conclude it at the Bhadra *mela.*

(9) **Warni.**—A continuous prayer (for 24 hours) is being performed here. It was started in 1934 A.D. by late Guru Partap Singh. A ghee lamp is burnt continuously and the *Dhoop* is put on the burning coal. The man on prayer duty is changed after every two hours.

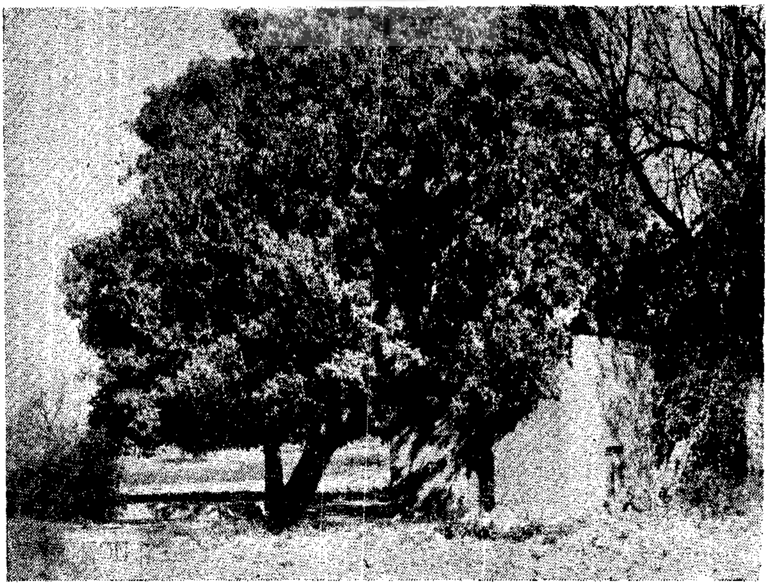
The other *warni* was started by Sri Guru Jagjit Singh in 1959-60 in the Kothi (the residential place of late Guru Partap Singh) situated in the garden. This is being continued in the same manner.

All buildings connected with the religious order, as a mark simplicity, have thatched roofs. Another special feature of Bhaini Sahib is that there is no hand-pump or tap in the whole village and residents drink water drawn from the wells. This is perhaps due to the great respect for cow and the feeling that the leather washer used in the tap might be made of the hide of the cow.

The present head of the Namdharis, Guru Jagjit Singh, lives alternatively at Bhaini Sahib and Jiwan Nagar (Sirsa, Hissar district, Haryana) where a new township has been raised exclusively for the Namdharis.

Chappar.—Chappar is situated on Ludhiana-Malerkotla Road about 31

Sada Barat



"Akal Bunga" (Place of Meditation) of Guru Ram Singh

kilometres from Ludhiana and about 3 kilometres from Ahmedgarh with which it is linked by a metalled road. There is no regular bus service for Chappar. It lies on 75° —48′—16″ Longitude and 30° —40′—25″ Latitude. Its population was 2,887 in 1961 against 2,216 in 1951. It has a Government Middle (Co-educational) school and Sub-Post Office located in it. The village has a panchayat.

Gugga Pir fair is held here in September. People assemble in thousands. All types of political conferences are organised on the occasion. The fair lasts for 3 days. The offerings are collected by pundits. The fair is attended to by all communities, who set up their *deras* at the place. Local tradition has it that Chappar Mari was built by bringing a few bricks from Bangar Mari situated in Rajasthan (erstwhile Bikaner State). From this *mari* bricks have in turn been taken to various other places in the district, such as Cheema Mari and Manopur Mari. Ordinarily people of the village visit the *mari* every day. On Mela days people of the village take their cattle also to the place.

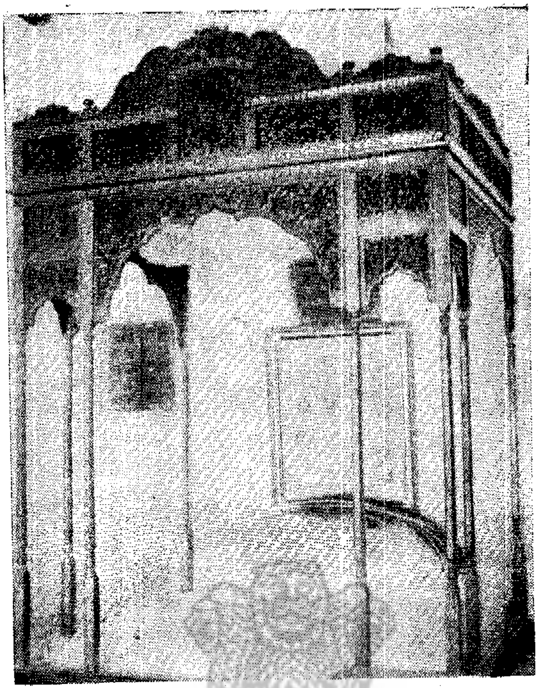
Cattle-fairs are also held in March and October every year.

Dehlon. Dehlon is situated at a distance of 19 kilometres on Ludhiana-Ahmadgarh Road. Its population was 2,196 in 1961 against 2,128 in 1951. The village has Government Middle School for Boys and Girls, Veterinary and Civil Dispensaries, Post and Telegraph Office with telephone facility and Police Station. A new Bazar has sprung up on both sides of the road. Dehlon lies on 75° 51′ in the Longitude and 30° —45″ Latitude. There is a historic Gurdawara built in memory of the Sixth Guru Hargobind. The Guru is said to have halted at the place on his way back to the Punjab from the Gwalior fort, where he had been imprisoned under orders of the Mughal Emperor. A big gathering is held at the Gurdwara on the *Sankrant* (first) day of the Bikarmi month.

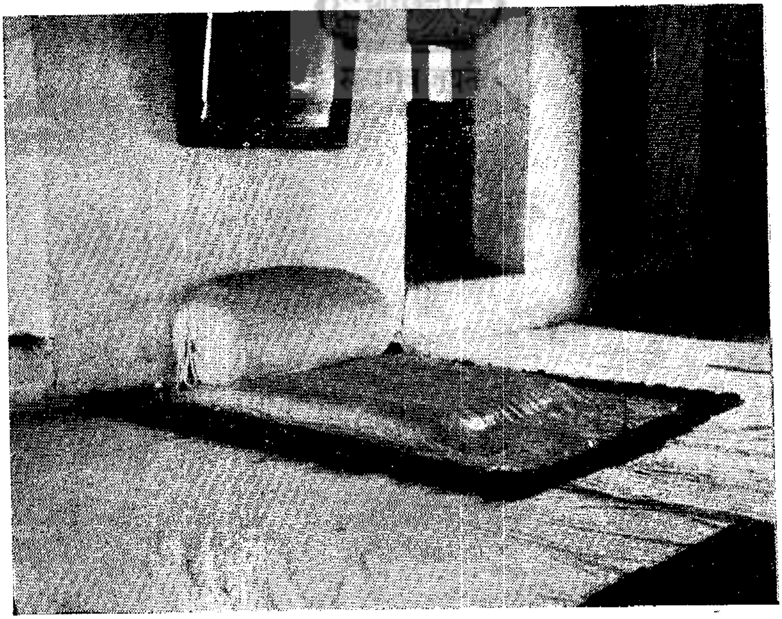
Doraha—Doraha is situated at a distance of some 21 kilometres on the G.T. Road from Ludhiana to Ambala. It is also linked by rail on Amritsar-Delhi railway line. It is a fairly old flourishing town. It is a Class III Municipality. It has a Government High School for Boys, Arya High School for Boys and Khalsa Girls High School. The town has a Civil Dispensary, Veterniary Hospital, Canal, P.W.D. and Forest Rest Houses, Post and Telegraph Office, Telephone Exchange and Police Post. It lies on 76°—2′ Longitude and 30°—48′ Latitude. Its population was 4,602 in 1961.

About a Kilometre from Doraha is an old serai said to have been built in the reign of Emperor Aurangzeb. The serai, an impressive structure when constructed, is in ruins at present. There is also a historic Gurdwara in the memory of Guru Hargobind.

Doraha was earlier a centre of timber, which was diverted *via* Sirhind



Masnad of Guru Ram Singh.



Gaddi Sahib—Place of Worship of Guru Hari Singh.

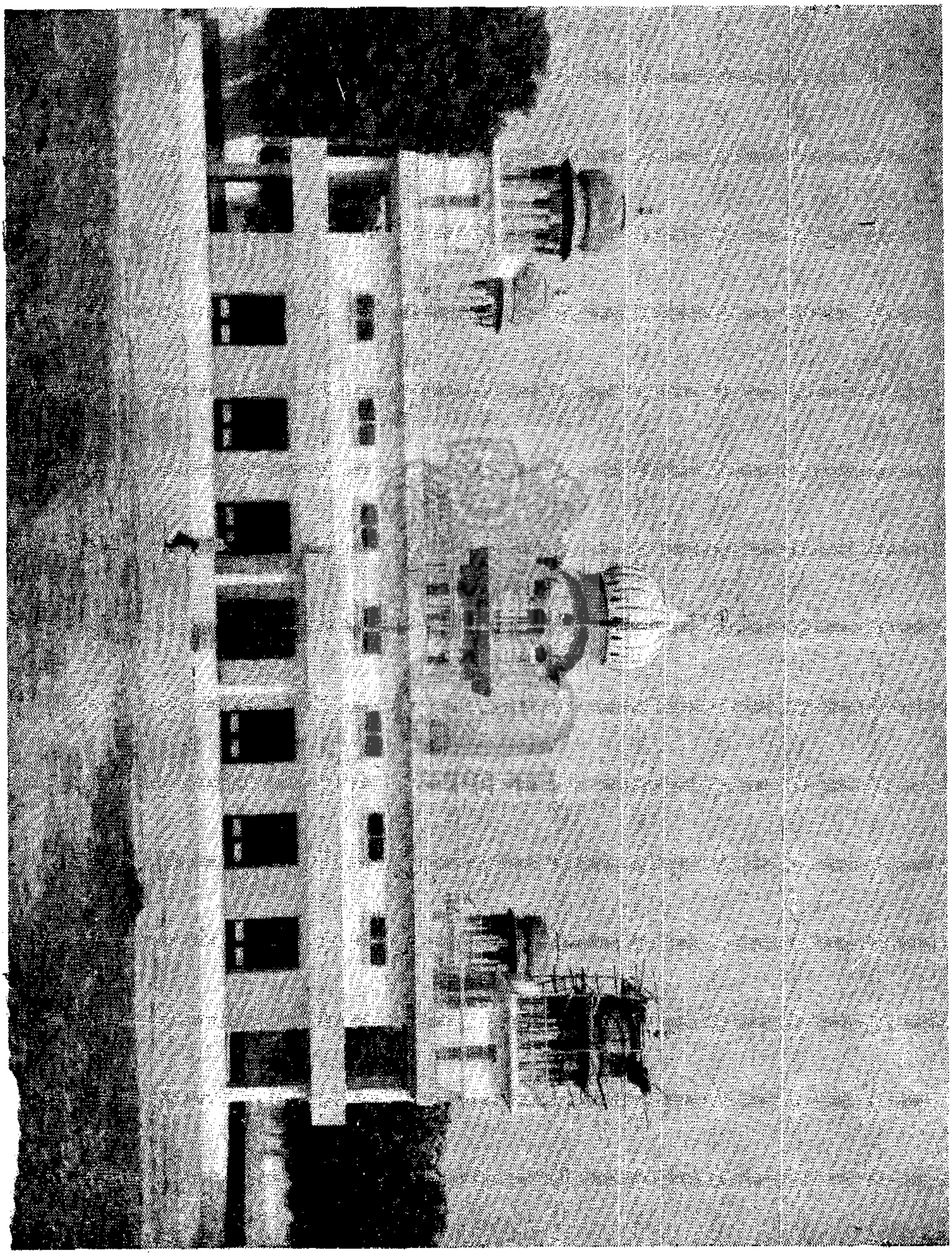
Canal from the river Satluj. Consequent upon the construction of the Bhakra Dam this has stopped. The town has, however, acquired considerable industrial importance. There are 3 Oil Mills and an Iron and Steel Re-rolling Mill. Motor and truck axle industry is coming up at the station.

Ghurani Kalan.—Eight kilometres from Payal on Payal-Malerkotla road, the ancient village was originally inhabited by Jats of Bopa Rai Got. It lies on 75°—59′ Longitude and 30° —44′ Latitude. Guru Hargobind, while returning from Gwalior, is said to have stayed for some time. (Period of stay is said to be 15 days to 2 months). The Guru is said to have stayed here with his relations. In his memory a historical Gurdwara has been costructed at the place. The Guru's *angrakha* having (52 'Kalis') a shoe and an illuminated manuscript copy of Panchgranthi (Gurmukhi) are displayed in a portion of the Gurdwara in a specially designed show-case. It is said that while he was detained in Gwalior, 52 Rajas were set free along with him as each of them caught hold of a 'Kali' of the *angrakha*. On the basis of the same legend Guru Hargobind is known as "Bandi Chhor Baba". In the Gurdwara there is also a *neem* tree where the Guru is said to have tied his horse with a *neem* tree-peg, which sprouted into the tree. There is another Gurdwara called 'Nim Sahib' where the Guru is said to have struck into the ground a *neem* stick after cleaning his teeth. The same had grown into the tree. Big Diwan is held in Ghurani Kalan on Guru Hargobind's birth day in the month of Asadh (June), in Kartika Puranmashi (October) and 7th Pausa (December) every year.

Gujarwal.—Gujarwal is about 19 kilometres from Ludhiana towards the east. The nearest railway station is Qila Raipur on Ludhiana-Dhuri Railway line. It is connected with the tahsil headquarters by bus service. Gujarwal has a Government Primary School, a Government High School for Boys and a Government Girls High School with Basic Class. It has a Civil Dispensary, a Veterinary Hospital and a Post and Telegraph Office. The village falls within the jurisdiction of Police Station, Dehlon It li.es on 75°—45′ Longitude on 30°—45′ Latitude. Its population was 3,766 in 1961 as compared to 3,764 in, 1951.

About 2 kilometres from the village there is a historic Gurdwara built in the memory of the sixth Guru Hargobind. It is known as Guru Sar or Manji Sahib. The sixth Guru is said to have stayed here for a month, the local tradition puts the period for about 3 months. The people of the village came to the Guru to pay respects. One of the residents named, Ch. Fatouhi came to the Guru with a hawk (Baz) on his hand. The Guru asked him to present the hawk to the saintly person. The Chaudhari hesitated and returned to his house. The hawk swallowed a bundle of yarn and was about to die. Believing it to be a curse of the Guru, Ch. Fatouhi brought the hawk to Guru Hargobind and expressed regrets for not having obeyed his command and requested him to accept the hawk. The Guru did not condescend to

Angrakha of Guru Hargobind, Gurdwara Ghurani Kalan



accept the deferred present because he had been pleased to ask Ch. Fatouhi to give the hawk to him only to test his faith in the Guru. The Guru, however, patted the hawk and a lump of yarn was vomitted out by it. On every *amawas*, on the birthday of the Sixth Guru and *Chet Chaudas* large number of people assemble at the Gurdwara. Free *langar* is served there.

Eight Bighas of land are attached to the Gurdwara. The Gurdwara is under the Shiromani Gurdwara Parbandhak Committee. A local committee is jointly incharge of the Gurdwara Guru Sar and another local Gurdwara known as Gurdwara Guru Granth Sahib. 175 Bighas of land is attached to the latter Gurdwara.

Gurm.—According to the revenue records the village was founded by the people of the said *got*. It is at a distance of about 23 kilometres from Ludhiana on Ludhiana-Malerkotla Road, which bifurcates at Dehlon and 6 kilometres of the distance has to be covered on Dehlon-Sahnewal Road. The railway station nearest to Gurm is Sahnewal situated on Ludhiana-Ambala Cantt. Railway Line. There is no direct bus service to the village. It lies on 75°-53″-11′ Longitude and 30°-40″-56′ Latitude. It has a Government Middle School (Co-educational) and a Post Office which is also located in the school. The village has a panchayat of its own. Its population was 1,260 in 1961 against 1,128 in 1951.

The village has a Gurdwara built in memory of Bhai Deep Singh Shahid. Bhai Deep Singh is said to have been born here and the same day happened to be his martyrdom day. About 4,000 people collect here on the occasion of the *mela* held from 25th to 27th January every year. Temporary bazaars are set up, *diwans* are held and the *mela* goes on day and night. Free *langar* is held for 3 days.

There is also the Samadh of Baba Dupahar Das, which the people of the village visit once a month (on the 10th day of the moon). 350 Bighas of land are attached to the Samadh. The income from the Samadh and the land is collected by a Committee which also controls the Gurdwara. The village has a Serai and a Panchayat Ghar.

Katani.—26 kilometres from Ludhiana on Ludhiana-Chandigarh Road is situated the village of Katani, which is linked with the main road by an approach road. The place is famous on account of the Gurdwara Katana Sahib built here both in the memory of the visits of sixth Guru Hargobind, who stayed here on return journey from Gwalior fort and the tenth Guru Gobind Singh, who came here disguised as *Uch-Ka-Pir* along with 5 adherents after his departure from Chamkaur. Guru Gobind Singh is said to have taken his meals at the place and hence the Gurdwara is also known as *Degh Sar*. A big hall measuring 16′×36′ has been constructed in memory of the tenth Guru. Katani lies on 75°-5′ Longitude and 30°-51′ Latitude. Its population was 1,832 in 1961 and 1,849 in 1951.

The Gurdwara is situated right at the bank of the Sirhind canal and a flight of stairs goes upto the canal water. It is built in two separate wings—one in the memory of the sixth Guru Hargobind, and the other in that of the tenth Guru Gobind Singh.

Knech.—The village is said to have been named by the original inhabitants after the name of the mound on which it is situated. It is about 18 kilometres from Ludhiana-18 kilometres on G.T. Road going to Ambala and 1 kilometre by the approach road on the left. The nearest railway station to Knech is Doraha on Ludhiana-Ambala Railway Line. Its population was 1,972 in 1961 compared to 1,586 in 1951. It has a Panchayat, a Veterinary Dispensary, a Government Primary School (Co-educational) and a Branch Post Office. The village is attached to the Police Station Sahnewal. There is no regular bus service.

The village has a historic Gurdwara known as Manji Sahib, which was built in memory of the visit of Guru Gobind Singh when he passed through the village after leaving Chamkaur. Guru Gobind Singh asked Fatouhi for a mare, which died on the refusal of its owner. The Gurdwara is managed by a local committee under the Shiromani Gurdwara Parbandhak Committee.

Lalton.—Lalton is situated at a distance of about 8 kilometres from Ludhiana. It had a population of 2,824 in 1961 as compared to that of 2,734 in 1951. It lies on 75°-47″ Longitude and 30°-51′ Latitude. Just near the village by the roadside there is Gurbachan Memorial Hospital run by the Brown Memorial Hospital, Ludhiana. There is a Government High School for Boys and Girls with Basic Classes. There is a Veterinary Hospital, a Branch Post Office, a Panchayat Library and three Government Primary Schools.

Earlier the village was included in the territory of Rai Muslims of Raikot. It was taken by Chaudhari Gainda, who functioned as ruler for some time. He had built a Gurdwara, a Shivala and a tank at the place. Free *langar* was also provided at the Gurdwara. Subsequently the village developed into 2 parts known as Lalton Kalan and Lalton Khurd. In revenue papers Lalton Khurd is known as Akalgarh.

Ludhiana.—Ludhiana, the principal town and headquarters of the district of the same name, lies on the Northern Railway, and is at a distance of 307 kilometres on the Grand Trunk Road from Delhi, on 30°-55′-0″ Latitude and 75°-50′-56″ Longitude. Its population was 2,44,032 according to 1961 Census as compared to 1,53,795 in 1951.

It is situated on the ridge just over the *Budha Nala*, or former bed of the Sutlej, about 11 kilometres from the present course of the river.

The town is believed to have been founded in the time of the Lodi Emporers, on the site of a village called Mirhota, in the year 898 Hijri (A.D. 1481). The founders are said to have been Yusf Khan and Nihang Khan Lodhi, or perhaps the latter alone ; and it is generally accepted that Ludhiana is a popular variation of Lodhiana. The place selected was a slight eminence on the south

bank of the Satluj, commanding the passage of the river, on the high road from Central Asia to Delhi. The history of the town is in a great measure that of the district as a whole and has been described in detail in Chapter II, History. Under the Lodies it was the seat of Government for this part of the empire, and a large fort was built on the site of the present one by Jalal Khan, grandson of Nihang Khan. The Mughals fixed the headquarters of the *sarkar*, or division of the province (*suba*) at Sirhind, and Ludhiana was only a *mahal*[1] or district ; but it did not lose its importance ; and, to judge from what are said to have been the boundaries of the Lodis' city, it must have had a population of 5,000 or 6,000. Neither did it suffer from the Durani invasions, although, as already noticed, Nadir Shah is said to have ordered a general massacre of the people of the town. On the downfall of the Mughal empire[2] it passed quietly into the hands of the Rais about the year 1760 A.D. and under them continued to enjoy the same measure of prosperity as before. Rai Kalha improved the fort, and it was one of the *thanas* under the rule of this family. Maharaja Ranjit Singh took it with the rest of the country from Rani Bhag Bhari in 1806 and gave it to his maternal uncle, Raja Bhag Singh of Jind. When Sir D. Ochterlony advanced to the Satluj in 1809, land was allotted to the British for a cantonment to the west of the town ; but the British held nothing else till 1835,[3] when on the death of Raja Sangat Singh, the town and the adjoining country were brought under British possession.

When the town was transferred to the British it appears to have occupied the space between the fort and ridge over the low lands (which later was the boundary on two sides), and the present Chaura Bazar upto the old Sabzimandi,[5] and on from that the Hazuri Sarak. The present Municipal Hall and the tomb of Pir Roshan[6] are situated outside the old limits on the west ; but to the east of this the houses covered the whole of the unoccupied space between the fort and the present town. No record can be found of the estimated population of that time. The old imperial road entered the town on the eastern side, where the Christian Medical College and Brown Memorial Hospital now stand ; and the British Residency was also on this side while the cantonments lay to the West, the present Civil Lines being the remnants

1. Mahal corresponded to the present tahsil better than to any other sub-division.

2. Under Jahangir and Shah Jahan the high road from Delhi to Lahore was provided with the *minars* at every two *kos* ; of these there are still standing one about a mile east of Ludhaina, and another some two miles further east : one near Sahnewal, one near *serai* of Lashkari Khan and one near Rajputan : they are all in good state of preservation.

3. Although the town was not nominally under the British till A.D. 1835, the British Political Agent appears to have exercised paramount influence in it from the first, and many of the improvements effected in it date from before 1835.

4. For details of the above sketch *see* chapter II, History.

5. During the year 1965, the Sabzimandi (Vegetable and Fruit Market) was shifted from its old site near the Municipal Hall to a new site across the Budha Nala, on the G.T. Road.

6. Pir Abdul Qadir Jalani (see para 64 of the *Settlement Report* by T. Gordon Walker).

of the former habitation. Under Sir Claude Martin Wade, Agent to the Governor-General for the Affairs of the Punjab and North-West Frontier, 1823—1840, and his successors, the town increased in size and importance, spreading out southwards. It became the centre of a very extensive trade in grain, sugar, cloth, etc., which found its way down the Satluj in boats from Phillaur. There had always been a small colony of Kashmiri weavers in the town, but in A.D. 1833 a famine in Kashmir drove numbers of this class all over the country, and some 1,500 to 2,000 of them were settled in this town, and started in trade by the exertions of Sir C.M. Wade, the British Political Agent. In 1842, on British withdrawal from Kabul, the family of Amir Shah Shuja-ul-Mulk, with a numerous body of adherents and attendants, came with the British ; and Ludhiana, then a frontier station, was fixed on as their residence. They at first took up their abode on the west side of the city ; but soon after shifted to the south side, where the land on which their houses and gardens stood was assigned to them. When after the Satluj Campaign of 1845-46 the Ludhiana district was formed, the civil offices were removed to the cantonment side of the town, and in 1854-55 the Grand Trunk Road was metalled and realigned to its present position. In 1854, the contonments were abandoned, a small force being retained as a garrison of the fort; but this change does not appear to have much affected the town, which, with the improved communications, was becoming more important every year as a centre of trade. The events of the Great Rebellion of 1857 have been related in Chapter II, History. The houses of the town at that time came to within a short distance of the fort, and, when the garrison mutinied, it was found to be in communication with the town-people just outside it-Sufis, Suds, Gujars, etc. Ricketts the Deputy Commissioner, Ludhiana, on the departure of the rebels, ordered the demolition of all the houses within a radius of 200 or 300 yards of the fort, the inhabitants settling down where they could. The Gujars were removed to their lands below the town ; the Sufis took up their abode in the vicinity of the cantonment Bazaar and the Suds and others spread themselves over the town. The opening of the railway from Delhi, to Lahore in 1870 gave a great stimulus to its trade and a number of shops and serais were built along the Grand Trunk Road, facing the Railway Station.

The town, as it existed about the beginning of the present century, was situated in an angle of the ridge, or high bank which to the east of it ran due north and south and then turned westward, forming the boundary on two sides. In the older part, the limits of which have been described above, the houses rose storey over storey, and were crowded together, while the streets and lanes were narrow and tortuous. But the new town to the south of the Chaura Bazaar bore all the marks of being modern. The streets were wide and straight, and the houses and shops mostly of one pattern. The principal streets, the

Chaura Bazaar and the Hazuri Sarak, were designed by Sir C.M. Wade himself, and one of his projects, the Iqbal Ganj, is a standing proof that he was rather too sanguine about the speedy development of the town for which he did so much. His successors, Assistant Agents and Deputy Commissioners, each added something, e.g., the Murray Gunj (Captain Murray) Ghalla Mandi, or grain market (Captain Larkins), and the Kaisar Ganj. The old town was divided into *mahallas* according to castes/groups of people (Suds, Sufis, Sayyids, etc.) ; but these had mostly been lost sight of. Attached to the town was large area, owned principally by Sayyeds, Gujars and Arains, most of whom resided within the town limits or in the old military bazaar, and this land was divided into eight *tarafs*.

During the last over half a century or so and particularly since the Punjab Partition of 1947, the limits of the City and its population have increased enormously. There has been extension on almost every side. The Civil Lines and the adjacent colonies, The Agricultural University Area, Bharat Nagar, Jawahar Camp, Model Town, Model Gram, Islam Ganj, Industrial Area 'A' and 'B' and extension, etc., have all sprung up during the last two decades or so. On the northern side, the limits of the city now extend beyond the Budha Nala upto the recently constructed Bye-Pass, connecting the G.T. Road, from village Bhora on the northern side with the new Industrial Area Dhandari on the southern side.

Ludhiana is an important commercial and trading centre and has become famous for small-scale industries.

Ludhiana has become the biggest centre of hosiery goods in India. The city is also famous for the manufacture of cycles, sewing-machines machine-tools, auto-parts (chassis and suspension) and various other small-scale industries, woollen and cotton goods and textiles.

The place is also well-known for the several professional and arts College viz., Guru Nanak Engineering College, Christian Medical College, Daya Nand Medical College, Punjab Agricultural University, Government College for Boys and Government College for Women and several schools for boys and girls. The city can also boast of three Public Libraries and a Swimming Pool.

Historical Places

There are few notable places in or around Ludhiana. The tomb of Pir Roshan, i.e., Pir Qadir Jalani, in the open space to the south of the fort, has already been referred to. There is also an old tomb, in the Sayyed's *mohalla* of one of their ancestors (Saiyed Ali *fil* Mast), and several Hindu temples (Shivalas and Thakarduwaras) which are not very old.

Near the city lie a few old Muhammadan remains. These are Shaikhanwali *masjid* and a tomb near the fort. The mosque, which has two minarets and three domes, was built in the time of Aurangzeb and the *Khanqah* of Suleman Shah Chisti, a square domeless tomb, is probably unfinished. The *Khanqah* of Saiyed Ali Sarmast, two tombs and a mosque in an enclosure are situated outside Purana Bazar. One tomb is octagonal and underneath it is a *tahkhanah*. The second tomb, according to an inscription, was built in A.H. 978. (1570 A.D.). The first tomb was probably built in the time of the Tughluqs. The *Khanqah* of Shah Qutb, west of the road to Phillaur, is said to have been standing for the last over six and a half centuries. The walls of the enclosure and the pavement are evidently of bricks from Sunet ; the *khanqah* of Sayyed Ali Buzarg, a brick tomb is said to have been built over three and a half centuries ago.

To the north of the city, the fort is situated on a point of the ridge overlooking the lowlands. It is a square structure with a high mud wall and a deep ditch, the inside measuring about 100 metres each way ; and it owes its present form to Sir D. Ochterlony, who made use of the bricks found in the neighbouring ruins of Sunet for building the fort.

To the west of the Railway Station and behind the district offices the old *Rakh* (plantation), commonly known as Rakh Garden, which contained a Municipal Swimming Pool, has recently been greatly reduced in extent. Except the Pool and small sorrounding area, the locality has almost completely been covered by the Government College for Women and other Government buildings and residential houses. The old cantonment has completely disappeared, except some houses and a few offices close to the town and the church and the cemetery.

Malaudh.—The historical town is situated at a distance of about 40 kilometres from Ludhiana on Ludhiana-Ahmedgarh Road—linked by approach road from Kup. It lies on 75°—56′ Longitude and 30°—38′ Latitude. Malaudh appears to be a very ancient place where the well known Mallas, with whom Multan or Mallustan is associated, are said to have attained prominence in a battle against the local people. As a result of their victory the place came to be known as Malla Udey—rise of the Mallas. In course of time it became corrupted as Malaudh. There was a Theh Loharan about 1 kilometre on southern side, which has now disappeared. It was in 1754 that Sardar Man Singh conquered the fort from the Malerkotla Afghans. Thereafter Malaudh remained under the Sardars. The town had a fortification wall which has been pulled down. Malaudh is also connected with the Namdhari attack on Malerkotla. In 1872 a batch of Namdharis approached the Sardar for assistance and murdered him on his refusal to join hands with them.

Malaudh has a Government High School (Co-educational), Middle School for girls and a Primary School for boys, a Post Office, Primary Health Centre and a Veterinary Dispensary.

Payal.—Payal is the headquarters of the sub-tahsil of the said name in Ludhiana tahsil. It is about 37 kilometres from the district headquarters. It lies on 30°—43′ north and 76°—7′ east. Payal is about 10 kilometres from Chawa Railway station by road. It is linked with G.T. Road at a distance of 13 kilometres from Khanna on Ludhiana side and also with Malerkotla by metalled road. The town is situated on an old mound.

As a part of the former Princely State of Patiala, Payal was a sub-tahsil of Dhuri tahsil under Sunam Nizamat (district). On the formation of Pepsu in 1948 its status was raised to that of a tahsil and it was placed under Bassi Nizamat (district). From August, 1953 onwards Payal was attached to Amloh sub-tahsil of Sirhind tahsil, Patiala district. From February, 1954, Payal was again raised to the status of sub-tahsil attached to Sirhind tahsil, Patiala district. From November, 1963, Payal sub-tahsil, comprising 86 villages, including Payal, has been attached to Ludhiana tahsil.

Payal has an interesting historical background. Some 760 years ago Shah Hassan, a Mohammadan Faqir, took up his abode on the old mound. He was followed by some Seoni Khatries of Chiniot, who settled there at the suggestion of the Faqir. While digging the foundation, a *Payal* or *Pazeb* (a woman's foot ornament) was found at the place. The Faqir advised his followers to name the new habitation after the ornament. The founder's tomb stands in the town. In A.D., 1236 Malik Ala-ud-Din Jani, who had rebelled against Sultana Razia, was killed by the supporters of the Sultana near Payal. During Emperor Akbar's reign Payal was made a Pargana of Sirhind. The town gradually grew in importance under the Mughals. Ibrahim Hussain Mirza, a relative of Emperor Akbar, on account of hostile attitude towards the Emperor, had fled to the Punjab. He plundered Sirhind in A.D. 1573 and ravaged the country around it. According to Mullah Abdul Qadir, author of Muntakhib-ut-Tawarikh : "His men, when he arrived at Payal, committed such atrocities upon the Muslim population as cannot be described". The Mirza was, however, hotly pursued by the imperial forces into the Punjab and thence to Multan where he died a wounded prisoner."

It was at Payal again, that, during his expeditionary march to the Punjab in 1581 A.D., Emperor Akbar got the good news that his rebel half-brother Mohd. Hakim, the ruler of Kabul, who had set out for the caputre of Lahore, had withdrawn from the Punjab. Under the later Mughals Payal formed a Pargana of the Pathan State of Malerkotla until it was annexed by Maharaja Amar Singh to the princely State of Patiala in 1766. The town is by

no means an important trade centre. Among the local industries may be mentioned carving of door frames or manufacture of *raths* and *bahlis* by the carpenters. Light country shoes are also made there.

There is an old fort in Payal. The name of the ruler who constructed it is not known. Its interior is fast crumbling. Presently the local Girls Primary School is housed in the serviceable portion.

Close to the fort there is a temple of Ram Chander. Dusehra *mela* is held every year. There is also 'Dasnam Ka Akhara'—a temple, another of this type is said to be in Varanasi. There is also a Devi temple constructed over a hundred years ago.

Payal has a Government High School for Boys with Basic Classes, a Government Middle School for Girls, a Primary Health Centre, Veterinary Dispensary, Police Station, Post and Telegraph Office with telephone facilities and a Ladies and Children's Park.

Qila Raipur.—Qila Raipur is linked with Ludhiana by rail and road. By rail it is at a distance of 18 kilometres and by road nearly 21 kilometres on Dehlon-Gujjarwal Road. It lies in 75°—49″—30′ Longitude and 30°—45′—45″ Latitude. Its population in 1961 was 4,928. It has Government High Schools for boys and girls, the latter with basic class, a Veterinary dispensary and a post office with telephone facility. The village has a panchayat.

Qila Raipur is famous as a sports centre. In the month of February Grewal sports tournament is held here every year. The 34th tournament was held in February, 1969.

A historical gurdwara, named Damdama Sahib, outside the village was built in memory of the 9th Guru Teg Bahadur. About a kilometre to the north-east of the village is the *Akhara* of Shri Dev Puri, an ashram which provides free boarding and lodging for Sadhus. It owns 250 bighas of land attached to the *Ashram*. Some two hundred inmates of the *Ashram* attend to all jobs from ploughing the fields to cobbling the shoes, etc., by themselves. Residential arrangements have been made in cubicles and in a big circular thatched pavilion. The Ashram has amenities like electric and water supply. With the produce from the land attached to the *Akhara* and donations in kind from the people of the surrounding area, a community kitchen is run for the benefit of the visiting and resident Sadhus, who are fed in a spacious hall close to it. The Sadhus going out on pilgrimage or to other stations may leave their belongings in the pavilion where several bundles are seen hanging from the beams of the thatched ceiling. The multi-storeyed Samadh of the founder of the *Akhara*, Sawami Dev Puri, who died some years ago, is under construction.

Rara (Sahib).—13 kilometres from Payal on the bank of the Sirhind canal there is a big Gurdwara called Rara Sahib. It lies on 75°—57′ Longitude and 30°– 43″ Latitude. Sant Ishar Singh is the head of the institution. This Gurdwara (karamsar) was constructed in 1936. The people of Katari—a village on the other bank of canal, donated 50 Bighas of land for the purpose Presently the Gurdwara has also acquired a 200-Bigha farm. Its produce is used for running the '*langar*'.

The Gurdwara has a very spacious *Diwan* Hall recently completed with ultra modern light and sound fittings. It can accommodate about 4,000 persons. In front of the Hall a vast enclosure is proposed to be utilized for open air Dewan on moon lit nights in summer. Sant Ishar Singh holds religious discourses at Rara Sahib and also in several other Gurdwaras.

Sahnewal.—To the south-east of Ludhiana at a distance of about 16 kilometres, Sahnewal is situated on Amritsar-Ambala-Delhi main railway line and the G.T. Road. It lies on 75°—59′—05″ Longitude and 30°—50′—27″ Latitude. Its population was 3,830 in 1961 compared to 3,618 in 1951. The town has a Government High School, Kanya Vidyala High School, Arya Girls School, Dispensary with indoor facility and Veterinary Hospital. There is a Police Station, Post and Telegraph Office and Telephone Exchange. There is a Panchayat Library and two other public libraries.

On account of its location near Ludhiana some Small-scale Industries have been developed there. It is a good market for wheat, maize and groundnut. A cattle fair is held half-yearly.

There is a historic Gurdwara known as Damdama Sahib, which is said to have been built at the place where Guru Gobind Singh stayed for a shortwhile after leaving Chamkaur. Free *langar* is available at the place.

Siahar.—Siahar is at a distance of 16 kilometres from Payal on Payal Malerkotla Road linked by a *kachha* approach road. It lies on 75°—55′ Longitude and 30°—42′ Latitude. Guru Hargobind is said to have stayed here. The *dakki* (forest) where he stayed is situated at a distance of half a kilometre from the village. In his memory a Gurdwara has recently been built there. His horse is stated to have died here. The legend goes that the Guru buried his dead horse with a costly *doshala*. This *doshala* was taken away by two low caste residents who further sold it to the local money-lender. The fact was reported to the Guru under whose curse misfortune fell on the miscreants.

Big *diwan* is held in Siahar on Guru Hargobind's birthday in the month of Asadh (June), on Kartika Puranmashi (October) and 7th Pausa (December) every year.

Sunet.—Five kilometres from Ludhiana, on Ludhiana-Jagraon Road, the ancient village of Sunet is situated. The place is also popularly known as Ucha Pind and Kacha pind probably on account of the existence of an old mound there. Its population was 1,622 persons in 1961 against 1,575 in 1951. It has a Government (Co-educational) Middle School. There is a Branch Post Office run by a Part-time teacher. The village falls within the jurisdiction of the Sadar Police Station, Ludhiana. The village has a panchayat. Sunet is famous for the huge mound, which is said to have measured 17,550 ft. in length and 1,200 ft. in breadth at the time it was visited by Sir Alexander Cunningham in 1878-79. At present the mound has greatly shrunk in size. A small portion still remains. Pieces of ancient bricks and potsherds are found scattered in large quantities. Numerous terracotta seals and other antiquities have been found from the place. Some interested persons have also collected a number of coins, clay seals and other relics from the site[7]. The old mound has been continuously rifled by contractors for readymade bricks and ballast which have been taken away to Ludhiana and even to Doraha Serai some 28 kilometres away for the construction of the railway line. The fort at Ludhiana is said to have been built with the material brought from Sunet.

The place is undoubtedly of great antiquity as vouched by the number and the variety of old coins found there. Sir Alexander Cunningham in his own report had acknowledged the collection of more than 1,000 coins, which related mostly to pre-muslim period[8]. On the basis of the overwhelming numismatic evidence it was inferred by him that the town of Sunet was in existence before the Christian era. The fact was proved by the coins of Uttama—Datta and Amogha—Bhuti[9]. It continued to flourish down to the time of Samanta—Deva, the Brahmin King of Kabul and the Punjab, about 900 A.D.

Since no coins of the Tomara Rajas of Delhi or of the various Mohammadan dynasties have been found, it is believed that Sunet must have been destroyed during one of the early invasions of Mahmud of Ghazni. The place remained uninhabited for centuries thereafter.

The above conclusions are broadly confirmed by the report of Tolbort, which confirms that vast quantities of building material have been obtained from the place by the people of the surrounding areas. About the history of Sunet very little is known beyond the popular belief that the place suffered a

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7. Several coin moulds, burnt clay seals and other objects procured from Shri Harbans Singh of Ghulal have been displayed in the historical museum of the State Archives at Patiala.

8. Report on "A Tour in the Punjab, 1878-79" by Sir Alexander Cunnigham, Vol. XIV PP. 65-67, 1882.

9. Sunet is also believed to be a later capital of the Yaudheyas on the basis of these coins. *Ibid*, p. 65, 1882.

convulsion on account of the curse on the king. According to the fable Raja Maj Gend or Ponwar of Sunet treated his subjects with great violence and cruelty. The king, being afflicted with ulcer was told that human flesh would do him good. So he had ordered that a human being might be brought from each household as occasion might require. One day it so happened that it was the turn of the only child of a widow. As the king's agents came to take away the boy, the mother's tears moved a holy man, who made an unsuccessful attempt to turn away the soldiers. In his rage he had cursed the town and its king to be destroyed. So it happened that the town was buried underground.

Another legend has it : Sirkap, the ruler of Sunet[10] was in the habit of eating one goat a day. The supply of the goats having failed, his cook served up the flesh of a young child. The Raja noticed the difference and the cook explained the difficulty. Sirkap was satisfied and ordered the cook to serve up a young child daily. When it was the turn of the child of a Brahmin widow the mother rushed to Mirhota (Ludhiana) and implored the great Saint Kutb Shah to save her child. The Saint obliged by killing the cruel king. The name of the Muslim Saint suggested the existence of Awans, who were actually found at Ludhiana. The story might have been connected with Sirkap by the Awan colonists of Ludhiana on their migration from Awan-kari district situated between Jhelum and Indus.

(c) Jagraon Tahsil

Jagraon tahsil of the Ludhiana district, with an area (1,064.60 Sq. kilometres) in 1961, lies on the south bank of the Satluj between 30°—35′ and 30°—59′ North and 75°—22′ and 75°—47′ East. It is bounded on the East by Ludhiana tahsil, on the North by Jullundur district, on the West by Ferozepore district and on the South by Sangrur district. The tahsil and the population of 242,662 in 1961 as against that of 208,646 in 1951. It contains the towns of Jagraon proper (population 29,617 in 1961), which is the tahsil headquarters, Raikot (population 11,239 in 1961) and 163 villages. The historic battle field of Aliwal (1846) is situated in this tahsil.

Bhundri.—Bhundri is a small village, about 26 kilometres north of Jagraon in the same tahsil. It lies on 75°—35′ Longitude and 30°—57′ Latitude. It is linked by road with Chauki Man—a railway station on Ludhiana-Ferozepore Railway line. The village has a Panchayat, a Middle School (Co-educational), a Veterinary Hospital and a Sub-Post Office attached to the school. There is a Primary Health Centre under the Community Development Block. Its population was 882 in 1961 against 334 in 1951.

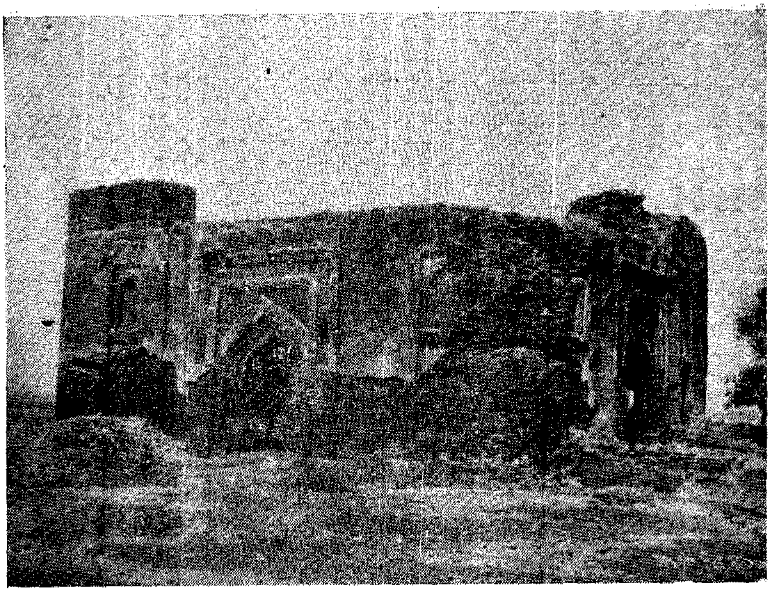
10. In the "Shajra Nasab Bandobast, 1882", the origin of the name of the village is given as "King Sarkap laid the foundation of the new town on a gold brick 'Sone KI Int', whereby it got the name "Sone Int". It became popularly known as Sunet". It is further explained that the earlier town had been completely deserted since long. The ancestors of the present owners on settling at the place retained the old name. Some gold coins were discovered from the site".

The village has been constantly inhabited since its foundation. The revenue records reveal that the original settlement was started by Bhunder Mallah (Boatman), also known as Bhunderke, who had to relinquish possession under adverse circumstances. Some eleven generations ago Rana Ladho Rajput, on account of his differences with fellow Rajputs, migrated to the place from Hatur and acquired proprietary rights of the village with the permission of the ruler of the day. Ever since the village has been owned by his descendants in the form of (*Patties* or divisions).

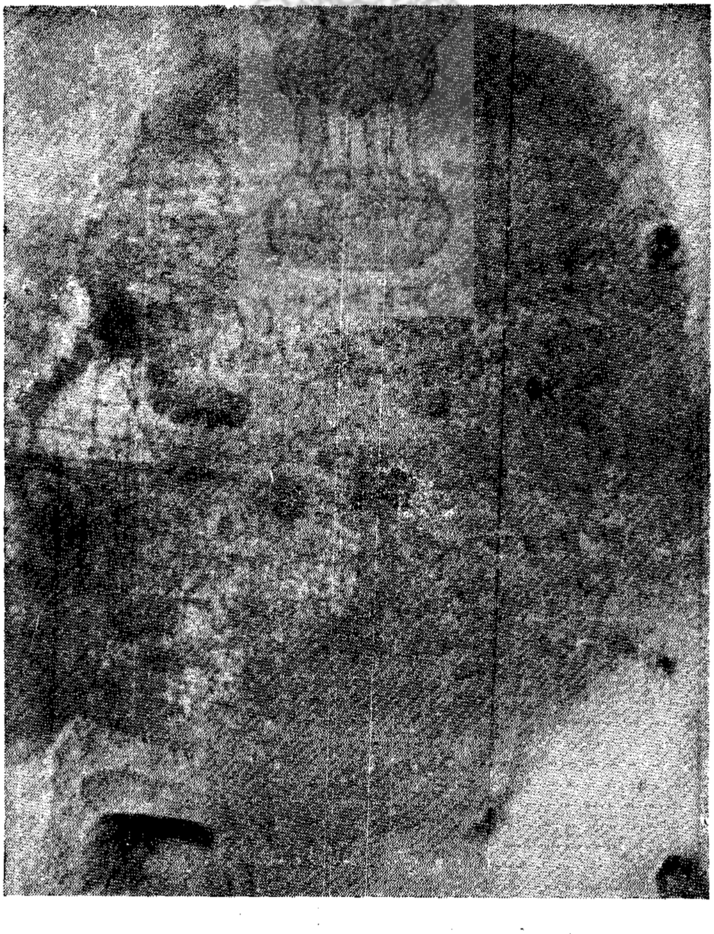
The place was the scene of one of the battles of the First Anglo-Sikh War, 1846. The action was fought here on 28th January, 1846. To commemorate the battle a lofty column about 60′—70′ high was raised on a platform about 10 ft. high by the British in 1870. A stone slab giving the description of the battle in English was fixed on one side. It has since fallen down. The platform carries on three sides the dates of the battle in Punjabi, Urdu and English. On the fourth the legend "Erected in 1870" gives the date of the commemoration column.

Guru Sar Sadhar.—12 kilometres from Raikot, 35 kilometres from Jagraon and 26 kilometres from Ludhian itself, Guru Sar Sadhar is associated with the sixth Guru Hargobind, who spent 5-6 months at the place. It lies on 75°—38′ Longitude and 30°—46′ Latitude. The development of this dry area into a fertile and flourishing agricultural land was largely due to the efforts of the Guru, who dug many wells and established a Sar or *Sarowar* near the hamlet of his devotee Bhai Jiwanda of village Sadhar. It was here in the month of September, A.D. 1631 that a powerful Muslim adherent of the Guru, Rai Jodh of Kangar, his pious wife and son, Chain Beg, came to pay homage to the Guru and placed at his disposal 500 horsemen, which greatly helped the Guru in his last 2 battles against the Mughal forces. It was at this place that about 1,200 Sikhs from Kabul and Kandhar came to pay homage to Guru Hargobind under the leadership of their *masands*, Tara Chand, Bakhat Mal and Bhai Dayala. During the stay of the Guru at Sadhar Bhai Karoria, another disciple, offered Rs 2 lakhs and regretfully reported that two valuable horses brought by him for the Guru from Kabul had been forcibly taken away by the Mughal officials on the way. Guru Hargobind deputed his trusted disciple, Bhai Bidhi Chand, who, with the help of Bhai Jiwan, a carpenter of Lahore, brought the horses to the Guru by risking his life. Impressed by the dedication and devotion of Bhai Jawanda, the Guru bestowed upon him a pair of his shoes as a gift. The shoe is still in the possession of the descendants of Bhai Jawanda and can be seen at their house or can be brought to the nearby Gurdwara on making a suitable offering.

On every full moon-day a big *diwan* is held at the Gurdwara which lasts till 8 in the evening.



Tomb of Rai Firoz, Hatur



Inscription at the tomb Rai Firoz, Hatur

There is a Government School for Girls, G.H.G. Khalsa College and College of Education with Basic and B.Ed. Classes in a beautiful building. The Primary Health Unit is housed in new Ranjit Memorial Building. The village has a Police Post, 2 Post Offices, one in the village and the other in the College of Education. There is a Panchayat and a Library. Guru Sar Sadhar has acquired great importance on account of the development of Halwara Colony about 2 kilometres away. A beautiful market has sprung up on the road and the two places have thus become linked together. The population of Guru Sar Sadhar was 2,923 in 1961 as compared to 2,731 in 1951.

Hatur.—Hatur is a village in Jagraon tahsil about 25 kilometres from the latter. It lies on 30°—36′—16″ latitude and 75°—25′—48″ longitude. Its population was 3,695 persons in 1961 as against the figures of 3,063 in 1951.

The present village, continually inhabited, was founded close to the old mounds which are believed to be very ancient. At the old site, also called Arura and identified with ancient Ahichetti, Lord Mahavira is said to have performed *char-mansa* or four months' recess in the time of Raja Kanaketu. The place was at that time known as Aichata Nagari (see 14th and 15th pages of the Dharam Katha). General Cunningham holds that Bhadaur may be identified with Arhatpur, which is undoubtedly named after Lord Mahavira, the Jaina Tirthankar or Arhat. Old coins and antiquities have been found at the mounds. People say that the ancient name of the place is Ahichatta and that its ruler, Raja Buddhamati, composed a work in Prakarit, entitled Dharma Katha, which is still used by the Puja tribe in the District. In the 15th Chapter of this book, it is mentioned that a former prince of the city of Ahichatta, named Kanaka Ketu, reigned at the time of Mahavira Swami. Under him the town was so large that Bhadaur and the adjoining villages were the suburbs of Arura.

Among the notable monuments at Hatur may be mentioned a Maqbara of Rai Ferozwala, near the village. The heirs of Rai Firoz were in possession of the building and continued to live in the village till the partition of the Punjab in 1947, when they migrated to West Pakistan. 30—35 years ago a big *mela* used to be held at the Maqbara. Some people still visit the Maqbara to pay respect and make offerings there. The place is, however, in very poor state of preservation. The roof of the building and the gates are missing. The Azmat Khanwali Masjid, a brick mosque said to have been built by the Mughal noble in the times of Emperor Shah Jahan, and another mosque entitled Barkhurdar Khanwali Masjid are also in dilapidated condition and in disuse. The Idgah and the Masjid Jali Khanwali are completely ruined. The Nikkamalwala Math, known to have been built in the time of Emperor Humayun, is again completely demolished.

The huge mounds or *thehs* are situated just outside the village. The outlying portions of the mounds have already been brought under the plough. The process continues and even the bigger mounds have suffered considerable erosion.

Since all the existing monuments at Hatur date back to the medieval period, it may be inferred that the present habitation started in the time of the Delhi Sultanate. Bharu and Lapal, sons of Sheikh Chachu, who as a Rajput was called Tulsi Dass before he embraced Islam in the 12th Century in the reign of Ghiyas-ud-Din Gauri, came to Hatur and initially lived by plunder under the protection of Udho Panwar. Shortly afterwards Bharu made himself the master of Hatur and Lapal settled in the adjoining village of Shah-Jahanpur. Seventh in descent from Bharu was Rai Kalha I, who took service under, perhaps, the last of the Syed Sultans of Delhi, probably in the beginning of the 15th Century. The family continued as a feudatory of the Delhi empire (Zamindar or Mustajir) under the Lodies and Mughals for several generations. The original site might have been the scene of mass scale destruction in consequence of repeated Muslim invasions from the north-west. The residents of Hatur believe that the place was deserted and reoccupied seven times. The existing village is said to have been founded the eighth time. Hence the name Hatur (probably meaning thereby that it was the 'Hasht' or 8th occupation).

Hatur has a Government High School and a Government Girls Middle School. There are Civil and Veterinary Dispensaries and a Primary Health Centre. The village has a Post Office and a Panchayat.

The construction of the metalled roads from Barnala to Hatur and to Jagraon and the electrification of the village (already underway) are expected to greatly increase the importance of the ancient village. Two cattle fairs are held at the place in April and October every year.

Jagraon.—Jagraon is a Municipal town and the headquarters of the tahsil of the same name. It lies on the Northern Railway, 40 kilometres West of Ludhiana-Ferozepore Road in 37°—47'—15" Latitude and 75°—28'—30" Longitude. It is the second important town in the district and had the population of 29,617 in 1961 as compared to that of 24,519 in 1951.

The town is not of great antiquity. It is said to have been founded about 250 years ago by Rai Kalha with the blessings of a Mohammadan Faqir called Lape Shah, who took up his abode on the site of the present town and prophesied that a big town would grow there. Even the streets as they run now were marked out by the Faqir. Rai Kalha invited cultivators—Gujars, Arains and Jats from the surrounding area and assigned them lands according to the number of each tribe. He also settled members of mercantile community

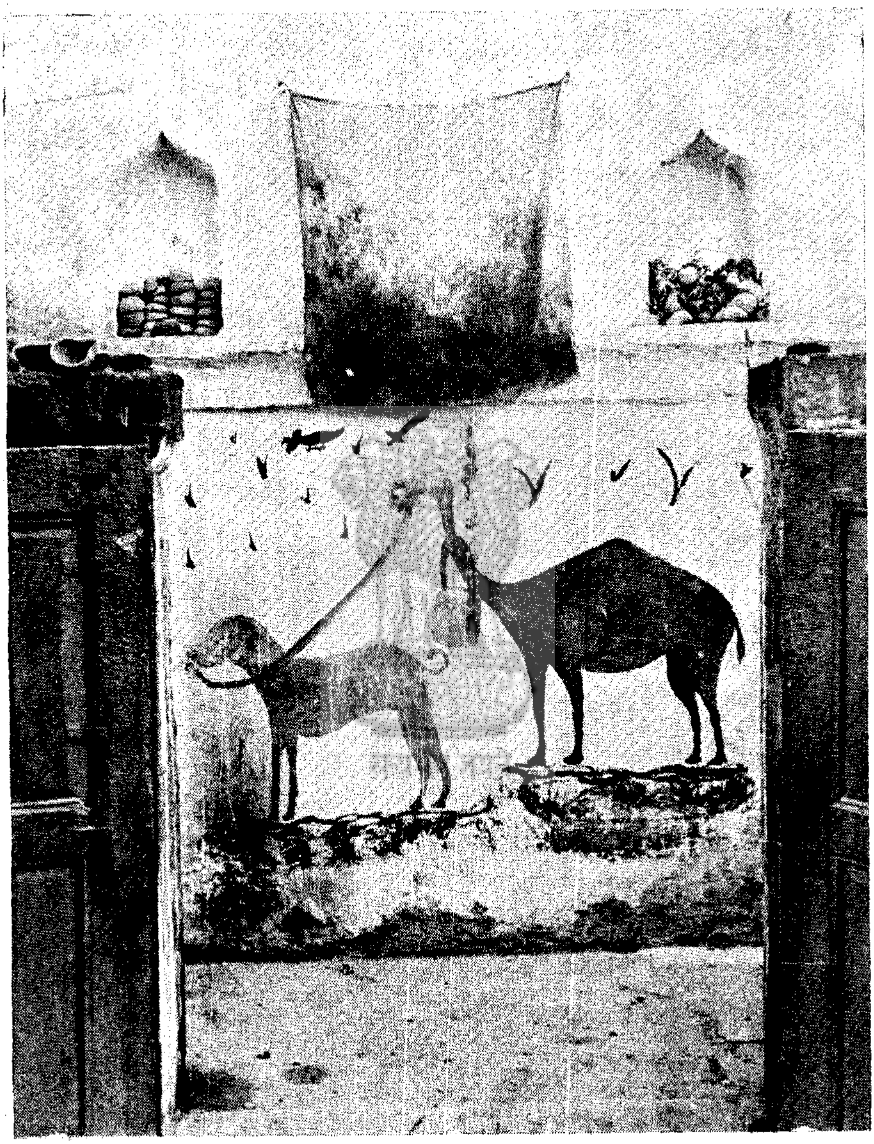
at the place and enclosed their dwellings with a wall, while the agricultural population settled down on the land earmarked for each tribe outside the town, the outlying areas were enclosed with the usual hedges (*War*). For the same reason the suburbs got the designation of *Agwars* (*Ag* meaning forward or outer).

The town was named after a Rajput Jirga or council, who were charged with the growth of the town and were probably known as the Rai's representatives. About 3 kilometres north of Jagraon on the West of the Sidhwan Road is situated a mound of some dimensions. It is called Solah and marks the site of an old village where the *Agwars* and adjacent villages of Sherpur, etc., are said to have arisen. It was here in 1802 that young Rai Alias met his death in the hunting field. Under the Ranis, who succeeded him, Ahmed Gujjar, the *thanedar* or the local representative tried to assert his independence. He was, however, expelled with the help of the ruler of Patiala. In 1806—8 Maharaja Ranjit Singh deprived the Ranis of their possessions. The country around Jagraon passed into the hands of the Ahluwalia (Kapurthala) chief. Under him the town became the headquarters of the Ilaqa or territory. The mud fort of the Rais was improved. The town of Jagraon passed into British possession with the rest of the Cis-Satluj territory after the first Anglo-Sikh War, 1846, when the fort was demolished.

Jagraon may be said to be a town of Pirs. The graves of some notable Pirs, such as Mohkam Din, Bandli Shah, Kheve Shah, Chup Shah and Zahir Wali Shah are situated there and merit description.

Lape Shah.—The small mausoleum of Lape Shah stands in the heart of the town. On one of the walls there is a painting of a camel and a dog. The legend has it that, led by the dog, the camel went round the town with a pot hung from the neck. Votaries of the Pir would put the food in the pot, which was brought by the animal to the master. The Pir is said to have himself laid out the streets of Jagraon. Every Thursday a fair is held there and both Hindus and Mohammadans offer alms and light earthen lamps filled with *sarson* oil. Lape Shah had said that Jagraon would be destroyed by floods. Accordingly the people still become panicky on even a slight indication of flood at the place.

Hazrat Mohkam Din.—His *khanqah* is situated just outside the town. On Thursday people assemble there to offer oil, salt, sugarcakes (*Patashas*) and flowers. From 13—15 Phalguna (middle of February) a big *mela* (Roshni) is held there and is attended to by thousands of people. The *Khanqah* has no regular attendant. A local resident, who has been entrusted with the keys by the Darvishes of Paona, a village 5 kilometres away from Jagraon, on Ferozepore road, opens the gate on Thursdays. The building is well maintained. Nearby



Pir Lape Shah's Place of Sitting, Jagraon

is the grave of a Hindu disciple named Ghadhi Mar, whom Mohkam Din had cursed to be always insulted by the people because in his desire to remain close to his master he had refused to go to a distant place. The grave is in ruins and is used as a dumping site.

The graves of Zahir Wali Shah and Kheve Shah are situated at a distance of about 3 kilometres from Jagraon outside Rehlan *agwar*. People offer alms there on Thursday. The graves being removed from the town, very few people visit them.

Fairs are also held on the grave of Chup Shah on 11th and 12th Asadha when banners (Jhande) and *degs* (cooked meals) are offered and on that of Bandli Shah on 25th—29th Asadha every year.

Haveli of K.B. Syed Moulvi Rajab Ali,[11] once a magnificent building is in ruins. The Haveli seemed to have been originally built on very grand scale and occupied the whole south-western side of the town. It was entered through lofty gates which could easily admit elephants. The building contained several spacious halls and rose to three storeys. A mosque and a *baradari*, which contained a big personal library of Syed Rajab Ali, a great scholar, were situated alongside the principal mansion. Even at present the ruined Haveli is occupied by several displaced families. Nearby, the *Idgah* outside Jagraon was built by Rajab Ali in 1264 A.H. corresponding to A.D. 1847. It has crumbled down. Jagraon was originally built as a fortified town. The outer wall along the main gate has, however, been pulled down and at places houses have been built on the older foundations. The grain market outside the town across the railway line was built in A.D. 1906.

Jagraon has Lajpat Rai Memorial Degree College, Government Junior Basic Co-educational Training School, Government Higher Secondary School for Boys and a High School for Girls. There are two Middle Schools (Private). 5 Primary Schools, a Civil Hospital, Maternity Hospital, Veterinary Hospital and a Civil Rest House. There are two Serais, one of them in a poor condition, Lajpat Rai Memorial Library and Jagraon Municipal Club. The town has a Police Station, 3 Post Offices, a Telephone Exchange and a Telegraph Office.

Jagraon has a flourishing market for cotton, wheat, maize and gram. There are 2 cotton Ginning, Pressing and Oil Mills. Recently tractor-parts are manufactured at the place.

Every month a cattle fair is held at Jagraon. The town is surrounded by suburban areas.

Jagraon has a cold storage. There are big godowns maintained by P.W.D. with the following storage capacity :—

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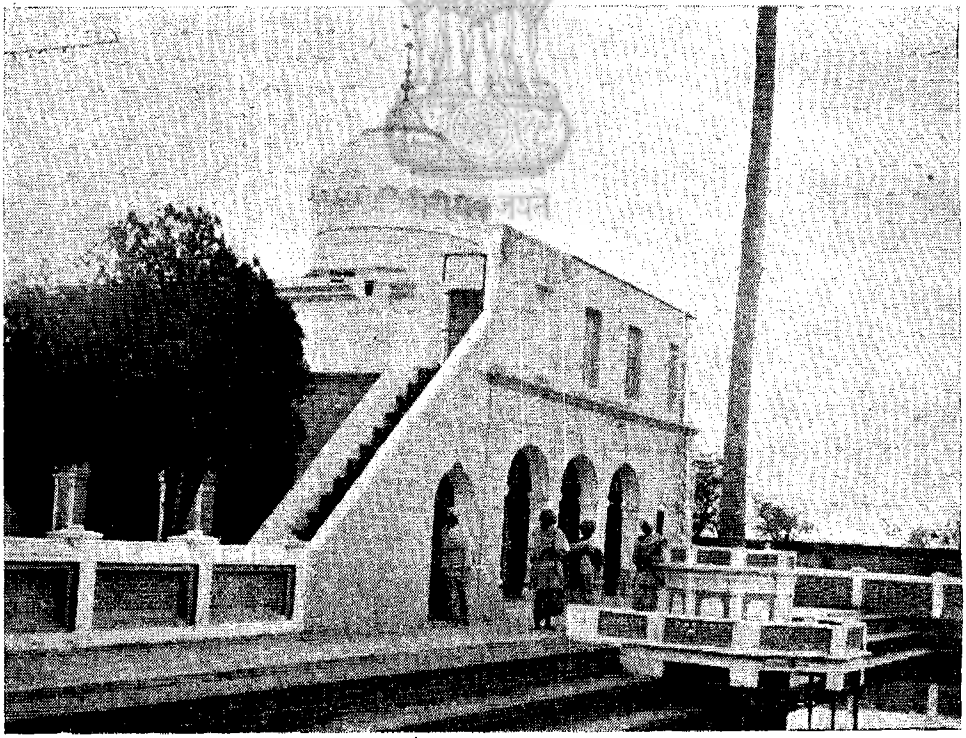
11. For a life-sketch of Maulvi Rajab Ali *see* Appendix I at pages 670-71.

A Painting of Guru Gobind Singh Inside Gurdwara, Rajkot.



Gurdwara Raikot.

55 Bin with the capacity 380 quintals

1 Lahore Shed—5,500 quintals

1 Ware-housing—5,000 quintals

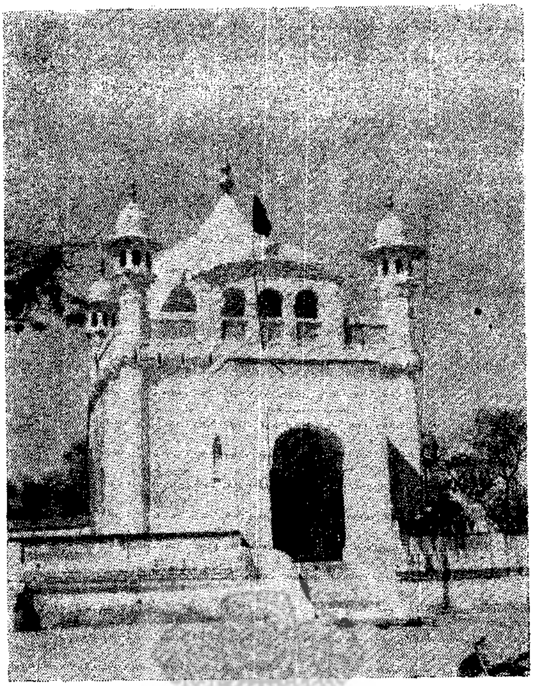
Lal Kothi—5,000 quintals

About 2 kilometres on Sidhwan Bet Road to the left of the town is a fairly large mound known as Solah. It is also popularly called *qabr* of *naugaza* (grave of a 9 yards long person). Baba Nand Singh of Kaleran, a renowned Saint of the area is said to have practised 'Bhagti' just close to the grave. The *bhora* (the underground cellar) dug by the Baba has been filled up by the people.

Nanaksar.—The construction of a splended commemorative Gurdwara of the said name near the little known village of Kaleran, one of the *agwars* of Jagraon, has given the place outstanding religious importance. The Gurdwara is about 5 kilometres from Jagraon by rail. It is a Railway Flag station about 45 kilometres west of Ludhiana on the Ludhiana-Ferozepour section of the Northern Railway. It lies in 30°—47′—57″ north Latitude and 75°—25′—26″ east Longitude. Its population was 136 in 1961 as against 34 in 1951. The beautiful Gurdwara along with the tank has been constructed through public contribution by S. Ishar Singh, a disciple of Sant Nand Singh, whose death anniversary is celebrated with great enthusiasm by thousands of his followers for 3 days from 11th—13th Bhadra, i.e., in the third week of August every year. Thousands of persons visit the Gurdwara on the occasion.

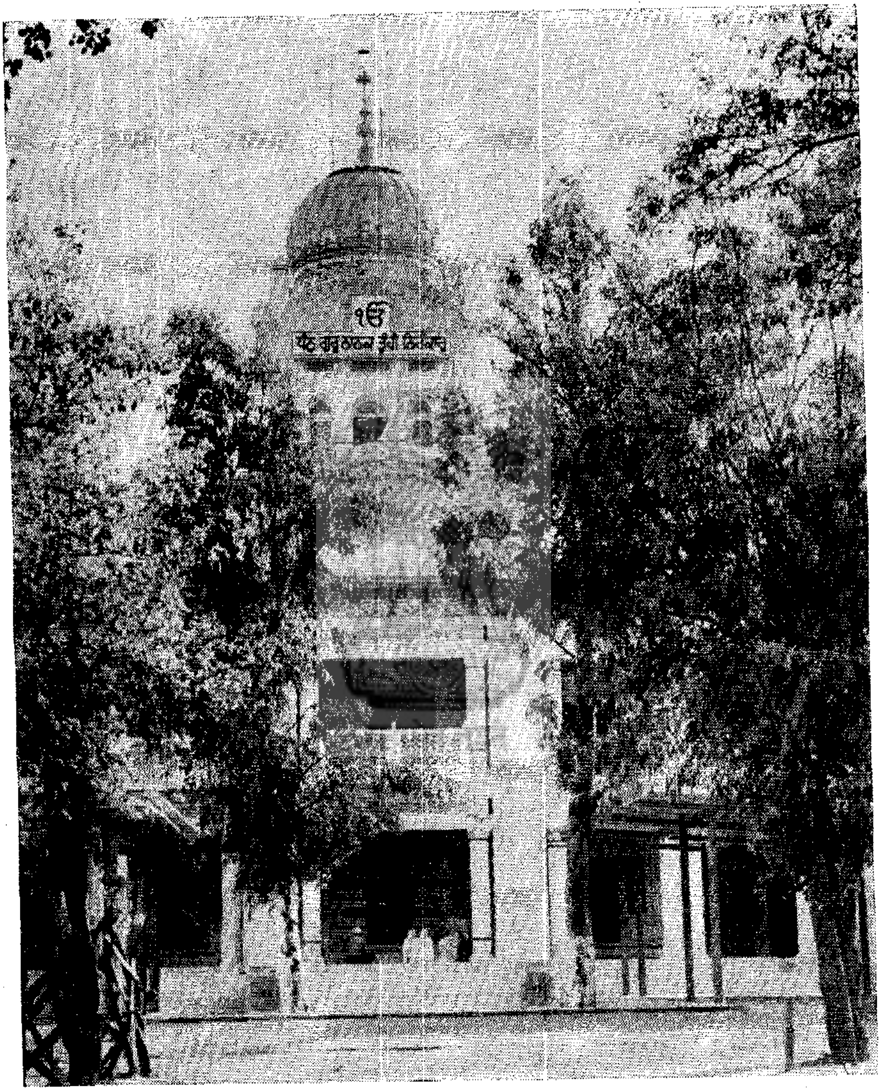
Underneath back portion of the main building a *gupha* or deep hollow in the ground, where Baba Nand Singh meditated, has been enclosed in marble in the form of room and tastefully decorated. A flight of stairs leads to the underground cellar. A life size portrait of Baba Nand Singh rests on a costly bed. Visitors who perform or undertake to perform certain prescribed religious ceremonies are allowed to visit the sanctum. The subterranean room is richly, perfumed with incense which constantly burns there.

Baba Nand Singh was born in Sherpur, an outlying village of Jagraon. He had renounced the world and meditated in *guphas* (underground cellars). To start with he did not build a Pucca Gurdwara. He had, however drawn up a plan of the present Gurdwara and its construction was started by Sant Ishar Singh in 1950. A very big tank and a beautiful Gurdwara in marble have been built. The *kalas* or the cupola of the Gurdwara is golden. A special feature of the Gurdwara is that no cooking is allowed inside it and no money is to be offered as *charahwa* or offering.



Tomb of Hazrat Mohkam Din, Jagraon

Inner View of the Tomb



Gurdwara Nanaksar

At two places Akhandpath is held in the Gurdwara. Side by side Jap Ji Sahib and Sukhmani Sahib are recited from morning till evening.

The tank was completed in a remarkably short period of 28 days. No women *sewadars* (attendants) are allowed to stay in the Gurdwara. Sant Ishar Singh occupied the *gaddi* for 13 years. At present Bhai Sahib Kundan Singh, Bhai Kehar Sihgh, Bhai Sadhu Singh and Bhai Narain Singh are recognised as Hazoorias or principal votaries. The roof of the Gurdwara has been constructed like a fort. There are 4 minarets. There is a Shish Mahal (hall of mirrors) in the Gurdwara, where Baba Nand Singh passed away. Only *sewadars* or special attendants and *pathis* (reciters of prayers) are allowed to enter the special apartments. The summer and winter clothes of Baba Nand Singh have been preserved in a glass ward robe. About 100 *sewadars* permanently live in the Gurdwara. They do not draw any salary and are deemed to have dedicated their lives for the service of the Gurdwara. People contribute in kind. Cooked food is brought there for distribution in truck loads during the *mela* days.

Raikot.—The revenue records relating to the year 1882 A.D. give the origin of its name as : "In the beginning Rai Ahmed, the ruler of the day, started the habitation at the spot and built a Kot (fortification) around it. The place took the name after its founder with the addition of word Kot and, therefore, came to be known as Raikot."

Rais were originally Hindu Rajputs, who had embraced Islam during the medieval period. Their descendants had continued to live there until 1947, when the last of them migrated to Pakistan. Raikot is situated at a distance of about 25 kilometres from Jagraon by road and is about 40 kilometres by direct road route to the south west of Ludhiana. It lies in 30°—38′—57″ North Latitude and 75°—35′—59″ East Longitude. Its population was 11,239 in 1961 as compared to 10,193 in 1951. Railkot is a Municipal town. Raikot has a Government Higher Seconary School for Boys and Government High School for Girls with Basic Training Class. Attached to the Gurdwara Tahli Sahib there are 2 Khalsa High Schools— one for Boys and the other for Girls. There are a Civil Dispensary and a Veterinary Hospital under the Zila Parishad.

Historical Places.—The palaces of the Rai Nawabs of Raikot, mostly in ruins, are now used for residential purposes. In one of these a Primary School is also run. Raikot is famous for the historical Gurdwara called Tahliana. Guru Gobind Singh came here from Machhiwara on his way to Muktsar. He sojourned at the place under a tree and asked a local resident, Nura by name, to bring him some milk. Apologetically he regretted his inability to procure any milk for the Guru because no buffalo was in milk at the time. However, with the blessings of the Guru a she-buffalo, when tied to a tree, was milched. The Guru gave Nura a metal pot known as

Gangasagar with many holes in it. Miraculously, however, milk if poured into the vessel will not flow out, but sand, when put in it, flowed out of the holes of the vessel. Rai Kalha on being informed of the presence of the Guru at the place came to pay respect to him. The Guru bestowed upon him a Patta and a *khanda* (sword). Out of his concern for the fate of two sons of the Guru taken to Sirhind, Rai Kalha had deputed his employee, Nura, to bring first hand information. On his return to Raikot the messenger was so overwhelmed with grief on the tragic occurrence that he hesitated to break the shocking news to the Guru, who could, however, sense his difficulty and required him to narrate whatever has transpired without any fear. The Guru had, through his own intuition, understood what had happened to his sons. As a token of his resolve to end the cruel Mughal Government he flourished his sword to cut a patch of grass at the place. The action was symbolic of his intrepid efforts to end 'Zalam Raj'. The sword was presented by Imam Bux, the descendant of the Rais in 1854 to the Deputy Commissioner, Ludhiana, for transmission to the Governor General[12] while the *Gangasagar* is stated to have been taken away to Pakistan by Inayat Khan, a descendant of the Rais.

Close to the place where the Guru had halted for rest, about 1 kilometre away from Raikot, a Gurdwara known as Tahliana or Tahli Sahib was built through the efforts of Sant Maghar Singh of Mohi in 1914. Sant Narain Singh, who had special interest in education, established two schools, one for the Boys and the other for the Girls in the estate attached to the Gurdwara. Sant Nihal Singh was responsible for the construction of an extension to the main Gurdwara near the tree under which Guru had taken rest. A tank (*sarovar*) is also proposed to be built at the site of the pond which separated the tree under which the Guru had rested from the other to which the buffalo had been tied.

About 13 kilometres from Raikot another Gurdwara connected with the visit of Guru Gobind Singh, to this area, has been built at Bassian in 1933. The Guru is said to have spent some time with Rai Kalha at the place and played chess with him. For the same reason the Gurdwara is called "Shatranj Sahib". A big *dewan* is held there every year on 30th Phalguna and 1st and 2nd Chaitra (about middle of March).

Tihara.—Tihara, though belived to be an ancient site (the old town has long since disappeared in the river and no traces thereof remain) is situated about 22 kilometres from Jagraon on Sidhwan Bet—Kishanpura road. It was a well-populated village before partition in 1947. Thereafter it has become deserted and has lost its previous importance. Earlier it had a good Mandi with considerable trade. At present almost all the houses are *kachcha*.

12. *See* Appendix II at pages 671-72

Tihara has a Government Middle School, Primary Health Centre and a Post Office attached to the School. An Ayurvedic Dispensary equipped with Family Planning facilities is functioning there. It has a panchayat. The population of the village has arisen from 412 in 1951 to 537 in 1961.

There is a Maqbara of Shah Diwan, where people come with offerings on Thursdays and light earthen lamps with sarson oil. It is said to have been built in the reign of Emperor Akbar.

(d) Samrala Tahsil

Samrala tahsil of Ludhiana district with an area of 873 sq. kilometres is situated on the south bank of the Satluj between 30°—38′ and 30°—59′ North Latitude and 76°—2′ and 76°—24′ East Longitude. The population of the tahsil was 2,17,446 in 1961 as compared to 176,725 in 1951. It contains the towns of Samrala, the tahsil headquarters (population 5,439 in 1961), Khanna (population 24,416 in 1961) and Machhiwara (population 5,413 in 1961). It comprises 292 villages.

Bahlolpur.—The town is situated in Samrala tahsil on a ridge over the Budha Nala, 10 kilometres east of Machhiwara by road and 50 kilometres from Ludhiana via Samrala. It lies in 30°—54′—0″ latitude and 76°—18′—35″ longitude. Its population was 1,205 in 1961.

The town was founded in the reign of Akbar by 2 khanzadas—Bahlol Khan and Bahadar Khan Afghans. Their descendants owned land in the area attached to the town and resided at the place until the opening years of the present century. Thereafter, they became obscure and the family lost its importance. The town itself betrays signs of decay as a result of languishing of trade on the river, which was largely responsible for its importance. [13]

The town has a Government High School (Co-educational) with Basic class and an Ayurvedic Dispensary. It has a number of old monuments in addition to the Maqbara of Hussain Khan built in the time of Akbar. The Maqbara of Alawal Khan, Suba of Dakkan, and a mosque and Maqbara of Abdul Rehman Khan built in the time of Emperor Shah Jahan are all in ruins. A few other Maqbaras at the place have suffered such rapid deterioration as to have been levelled to the ground. The construction of a Pucca road to Samrala via Jhar Sahib and a regular bus service are expected to salvage and sustain its importance.

Jhar Sahib.—Jhar Sahib is about 48 kilometres from the district headquarters by road via Samrala. It lies on 76°—18′ Longitude and 30°—54′ Latitude. There is a *kacha*/Pucca road from Samrala to Jhar Sahib about

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13. Its population, 3,369 in 1868, had fallen to 2,418 in 1891 and 2,194 in 1901. The Deputy Commissioner wrote in 1881 :

> "The steady decay of the place may be attributed to two causes : the first is that during the Sikh rule a number of Pathans of Bahlolpur served in the wars, and brought wealth and plunder to the place ; but since our (British) rule these men have given up service and have been living on their savings ; the second, the health of this town is very bad on account of the large *jhil* formed by the Budha Nala close under its walls." (Ludhiana District Gazetteer, 1904, Pt. A. p. 227).

14 kilometres in length. The village has been entered in the Revenue Records as Chuharpur. It is about 13 kilometres from Samrala. In fact the old village was deserted long ago and the new habitation has been named after the historical Gurdwara, which has been constructed there. Its population was 287 in 1961 against 106 in 1951.

While coming out of Chamkaur fort in the night Guru Gobind Singh is believed to have spent about 8 hours in the *Jhar* (jungle) and did not meet any Sikh there. Thereafter he left for Machhiwara, where he met 2 of his 5 *pyaras,* namely Bhai Daya Singh and Bhai Dharam Singh, and a disciple Man Singh. Earlier a small Gurdwara was built at the place. A very big building was raised in 1956-57. Free *langar* is available all the time. About 85 acres of land is attached to the Gurdwara. A big *mela* is held on the *Sankrant* (first) day of the Bikrami month. The Gurdwara is under the Shiromani Gurdwara Prabandhak Committee but is managed by a local Committee.

Khanna.—The town, according to the Revenue Records, 1882, was founded by Khana Rajput and derived its name from him. However, it come to be pronounced as 'Khanna' through common usage. The place has been continuously under habitation and has never been deserted. Very little is known about the early history of the town. During the Misl period Khanna became the seat of one of the petty chiefs among whom the territory was divided. Mai Daya Kaur was the last representative of the ruling house. The large Jagir lapsed on her death in 1850. Among the places of interest may be mentioned an Imperial Serai built in the time of Emperor Aurangzeb, an old Sikh fort and a *Baoli* (tank) of bricks, at present dry and in ruins, built by Mai Daya Kaur.

Khanna is a Class II Municipal town situated on the Northern Railway and the G.T. Road about 42 kilometres from Ludhiana. It lies on 30°—42′—11″ North Latitude and 76°—13′—32″ East Longitude. Its population was 24,416 in 1961 as compared to 12,646 in 1951. The town has developed into a flourishing market for groundnut, maize, cotton, *gur*, wheat and other agricultural products. A new Mandi and Model Town are under construction. Khanna is fast growing in industrial importance. It has several oil and cotton mills and can boast of the first groundnut pressing Mill in the State, which will not only extract maximum oil from the nuts but is also expected to yield valuable byproducts.

The town has A.S. Degree College, A. S. Higher Secondary School, Government Girls Higher Secondary School, Khalsa High School, Putri Pathshala High School, Sanskrit College and 5 Primary Schools. There are

Civil Hospital, Ladies' Maternity Hospital, Municipal Dispensary and Veterinary Hospital. There are 3 *dharamshalas* and P.W.D. Rest House.

Lal Kalan Gurdwara (Guru-Sar).—10 kilometres from Samrala on Ludhiana road linked by an approach road, it lies on 76°—6′ Longitude and 30°—50′ Latitude.

While coming from Machhiwara disguised as *uch-ka-pir,* Guru Gobind Singh is said to have stayed here beneath the *beri* tree. As Musalmans were in pursuit, he did not stay here for long and left for Katani, a place at a distance of 3 kilometres from Lallan Ke on the bank of the Sirhind Canal.

The sixth Guru Har Gobind is also said to have stayed and tied his horse beneath the tree. There is a small round Gurdwara built in memory of both these Gurus. The two storeys of the building therefore, contain 'Manjis' of the 6th and the 10th Gurus.

The deorhi of this Gurdwara was built by Guru Ram Singh (Kuka Guru) of Bhaini Sahib. The Gurdwara is looked after by a Namdhari Granthi.

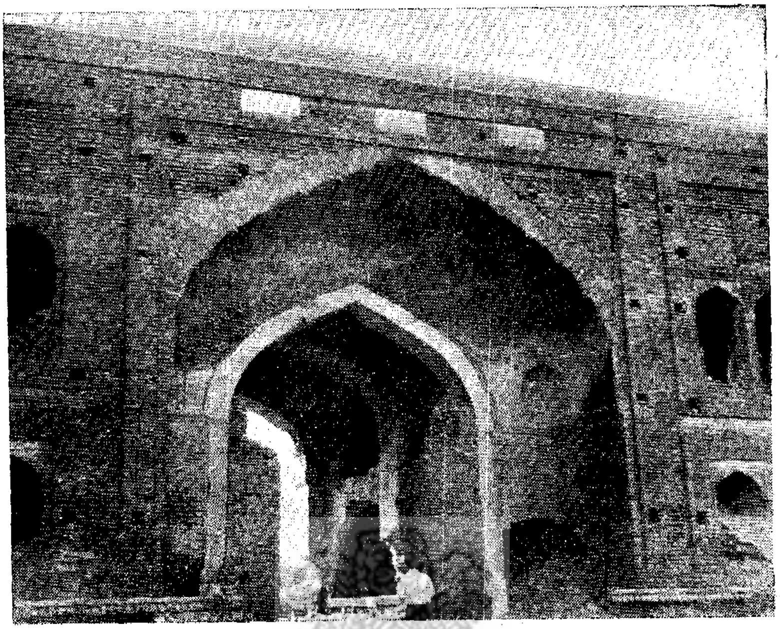
Machhiwara.—Initially fishermen might have settled at the place and hence it got the name of abode of fishermen. It is situated on the ridge over the Budha Nala, about 30 kilometres to the east of Ludhiana on the old Rupar road. A metalled road about 10 kilometres long connects the town with the tahsil headquarters of Samrala, onwards which there is also a metalled road to Ludhiana. A new Pucca road has recently been built from Machhiwara to Rahon. It has reduced the distance of Nawan Shahr from Samrala to barely 30 kilometres. Rahon is thus 23 kilometres distant from Samrala. Earlier these stations had to be reached by the much longer route via Ludhiana and Phagwara. A bridge on the river Satluj is expected to be completed shortly to enable through traffic to pass over it. Machhiwara has a Police Station, Veterinary Hospital, Primary Panchayat and a Canal Rest House. The small town lies in 30°—55′—0″ Latitude and 76°—12′—1″ Longitude. The population was 5,413 in 1961 as compared to 4,681 in 1951.

Machhiwara is said to have existed since ancient times. The name of the place finds mention in Mahabharata ; but no historical evidence is forthcoming to prove that it is older than 900 years ago when it was founded under the Ghori dynasty on the south bank of the Satluj like Ludhiana itself. It was during the Ghorian period when the Rajputs first settled at the place. Under the Sikhs Machhiwara became headquarters of the Sodhis, who had built here a large brick fort at present occupied by the Police Station and a *Diwankhana.*

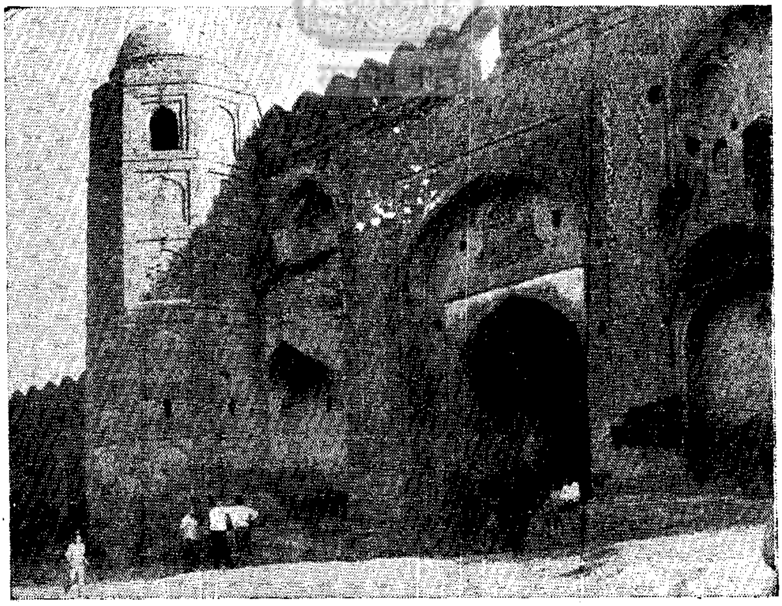
Gurdwara Lal Kalan

The old town is surrounded by several historical buildings, which include Sujan Shah Wali Masjid, built in the time of Mohammad Shah by the ancestors of Saiyed Qasim Ali, the mosque of Mehr Ali Shah or Qazi Masjid, built in stone during the reign of Sikander Lodi in AH 923 or 1517 A.D. by lady Fateh Malik and the *Ganj-i-Shahidan* or the treasury of martyrs, west of the town which probably signifies the tomb of all those killed in the famous battle of Machhiwara in 1555 A.D. The Diwali Devi, Bhadarkali, brick temple about a kilometre away from the town was built about 200 years ago. Near about are the remains of an old mosque built of blocks of *kankar* (hard bits of mortar). Around the site of the mosque are many ruined graves and the ground is littered with the remains of old buildings. Many of the bricks are of unusually large size, which shows that the place is fairly old. There is a well which is said to have contained an inscription showing that the man who sank it had previously sunk 360 similar wells in Machhiwara. 5 wells to the west of the town are built of large bricks. They also indicate that the town might have formerly extended to the west. Sodhi Karam Singh built a Gurdwara at the place to commemorate the visit of Guru Gobind Singh about 265 years ago. The tenth Guru on departure from Chamkaur and after staying for the day at Jhar Sahib (Chuharpur) came to Machhiwara in the night, took water from the well owned by Gulaba and Panjaba *masands* of Machhiwara and rested at a short distance from the well. While the Guru was asleep, his disciples, Daya Singh, Dharam Singh and Man Singh spotted him and recognised him from the diamond fitted in his ring. The Guru was bare-footed and his feet were bleeding. They placed their heads on his feet. The Guru woke up and met them. Gulaba and Panjaba came to know about the arrival of the Guru and his Sikh disciples and took them to their house. Thereafter they shifted to the house of Gani Khan and Nabi Khan, Muslim well-wishers of the Guru. They arranged to take out the Guru on a charpoy disguised as Uch-Ka-Pir after clothing him with blue garments, which were dyed at the place. It was planned to take the Guru to Guru Sar (Lal Kalan) and Katana Sahib (Katani). The party was intercepted at Kirpan Bhet, a place some 3 kilometres away from Machhiwara and the Guru was allowed to proceed further on confirmation of the identity of the 'pir' by a Moulvi, who happened to be a retired officer of the Mughal army and the Persian teacher of the Guru. The original Gurdwara enclosing the *karir* tree has been vastly extended and improved. The house of Panjaba and Gulaba, which contains the earthern vat in which the garments of the Guru were dyed blue by a local dyer, and the house of Gani Khan and Nabi Khan along with '*bhora*' and '*attari*' have been converted into Gurdwaras.

At Gurdwara Charan Kanwal big annual fairs are held on the occasions of Baisakhi (in April) and Maghi (January).



Serai Lashkari Khan.



Old Serai at Doraha

Rahawan.—Rahawan is situated about three kilometres from Khanna on the road to Samrala. Rahawan lies on 30′—43″—34° North Latitude and 76′—13°—32″ East Longitude. Its population was 2,390 in 1961 as against 1,484 in 1951. The place has got an old mosque built of bricks, in a very bad state of presentation at present. The village has got a Government Primary School (Co-educational) and a Sub-Post Office attached to the school. There is a panchayat in the village.

Archaeological explorations at the old site have yielded antiquities dating back to about 1,000 B. C.; earthern wares and other objects discovered from the *thehs* are believed and belong to the Aryan period.

Serai Lashkari Khan.—Situated at a distance of about 26 kilometres from Ludhiana on G. T. Road towards Khanna, Serai Lashkari Khan is an impressive building with the four walls still in tact. The structure, however, appears to have been neglected since long. The vast enclosure about 100 yards on each side gives some idea of its magnificient structure and exceptional size. The interior of the Serai has been allotted to agriculturists and is under cultivation.

The Serai has 4 gates on four sides and 120 "hujras" (small rooms), 30 on each side. Of the two wells, one adjoining the mosque in the centre of the courtyard is broken and in disuse. The other is used for irrigation. A small contingent of soldiers could easily be deployed in the Serai for safety of the inmates as is evident from the construction pattern of gates.

Built by Lashkari Khan, a moghul military general, in the reign of Emperor Aurangzeb in 1078 A. H. (1667 A.D.), as inscribed on marble slab on the front gate, the building is a typical specimen of the carvan Serais which were built at convenient distances all along the road from Delhi to Lahore. The huge structure was strong and spacious enough to protect the hosts of traders and their wares from pilfering during their sojourn on the way. Like the similar carvan Serai at Doraha, which is almost completely ruined, the gateways of the carvan Serai were decorated with enamelled tiles in geogmetrical designs.

Serai Lashkari Khan is a characteristic relic of the mughals and conveys the impression about its massive size which should have been commensurate with the volume of trade which must have flowed along the high way to central Asia through the heart of Hindustan.

Samrala.—A Municipal town and the headquarters of the tahsil of the same, name, Samrala is about 34 kilometres to the east of Ludhiana on Ludhiana-Chandigarh Road. It is also connected by road with Khanna, Machhiwara, Ropar and Rahon. Samrala is situated on 30°—50′—12″ North Latitude and 76°—11′—36″ East Longitude. Its population was 5,439 in 1961 as compared to 4,734 in 1951. Samrala is a Class III Municipality. It has a Government Higher

Secondary School for Boys and Government High School with Basic Class for Girls. It has an Industrial Training Institute. There is a Veterinary Hospital and Primary Health and Family Planning Centres. Samrala has a Samiti Rest House, a Canal Rest House, Post and Telegraph Office and Police Station. The situation of the town on the National Highway from Chandigarh to all the principal towns in the State has greatly added to its importance.

Sanghol.—Sanghol, popularly known as Ucha Pind, in Samrala Tahsil, is situated about 20 kilometres from the tahsil headquarters and about 54 kilometres from Ludhiana on the Chandigarh-Ludhiana road. The village lies in 76°—23′ Longitude and 30°—47′ Latitude. Its population rose to 2,408 in 1961 as compared to 614 in 1951. The village is situated on top of a big mound, which is believed to be very old. Practically the whole of the new village has been constructed with the burnt bricks dug out from the ruins of earlier inhabitations. Surface finds from the mound, especially after the rains, include copper, silver and gold coins and beads etc. As a result of digging or even ploughing by the farmers in the lower strata of the mound large quantities of antiquities and earthern-wares of a special conical type have been recovered from time to time. The coins found at the place clearly establish the historical sequence at least from the Gupta period up to the Sultanate. Among the coins the earliest is a gold coin of Kumar Gupta,[14] and the last one bears the name of Sultan Balban.

The earthen-wares are pots and vases of varying sizes. Large size bricks or tiles with deep marks of 3 fingers have been found at the place. Other articles include grinding-stones, votive tanks and clay seals. A large carved red sand stone trough has also been found at the place.

The antiquities accidentally dug out or found from the surface of Sanghol clearly indicate that the site was a flourishing town in early times. Perhaps it was abandoned several times. Hence the great height of the mound and the name Ucha Pind, because it is visible from a long distance.

Some of the stone sculptures recovered from Sanghol bear marked Mongoloid features. The names given to some of the localities of the village even at present, such as "pheelkhana" and "*mahal.*" are indicative of the fact that the place enjoyed a very high status and was probably the seat of the ruler of the area. Sanghol is said to be the ancient Sangal Deep ruled by Raja Sang. The famous Rup and Basant brothers, who figure in legendary history, are said to have belonged to Sanghol.

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14. The Coin was purchased by the State Museum from a local resident, who had found it from the surface towards the west of the mound. It bears the inscription alongside the figure of the ruler : "Kumargupta Prakarmi". On the reverse is the figure of goddess Laxmi. Coins from Gutpa period up to the reign of Balban were collected by Shri Tara Chand of Sanghol, at present Professor at H.N. College, Hariana. An article on the same was published in Jagriti, dated June, 1956.

The bulk of the archaeological evidence at Sanghol leaves little doubt that the mound, which is still about 70—80 ft. raised from the surrounding area, is very ancient and excavations at the place might yield rich historical data.

Sanghol is situated close to the old bed of river Satluj as evidenced by white sand found over a wide stretch near the locality. Sometimes boat oars have been reported to have been found here. The site seems to be contemporaneous with the mounds at Sunet and Hathur.

Sanghol has a Janta (Co-educational) High School, Girls Middle School and Primary School. The village has got a panchayat.

Till 1948 Sanghol formed part of the former Princely state of Patiala and was included in the erstwhile Pepsu on the merger of the States thereafter. The village was transferred to Ludhiana District on January 25, 1950 in connection with the exchange of enclaves.

सत्यमेव जयते

APPENDIX I

MAULVI RAJAB ALI

Rajab Ali hailed from an old and well known Syed family of northern India ; his ancestry dated back to Syed Mahmud, a celebrated theologian who migrated in 1501 A.D. from his home in Multan and attached himself to Sikandar Lodhi of Delhi. Fifty years later, in Akbar's time, the Syed was granted a jagir at Batala to which additions were made later by Emperor Jahangir. During the reign of Muhammad Shah one of the descendants of the family was granted twelve villages in Ludhiana District. They continued to flourish until the beginning of the nineteenth century when Dewan Mohkam Chand, representattive of Maharaja Ranjit Singh at Jullundur, seized the jagir and reduced its holders to poverty.

To Maulvi Rajab Ali belonged the privilege of restoring the fortunes of the family. He started his career in 1826, as a teacher at the Delhi Madrasa on a salary of Rs. 10 p.m. For this post he was especially selected by Joseph Henry Taylor on account of his intellectual attainments. After one year's service at the Madrasa, Rajab Ali moved to the south in search of more lucrative employment. He stayed for a short time at Bharatpur, Akbarabad and Gwalior and was for some time engaged by John Reef Ouseley at Hoshangabad. Thereafter he took up service as Amin in Bhopal State. Later he secured post in the office of the Political Agent at Ambala and soon rose to the position of Head Reader (Mir Munshi). In this capacity he was transferred, in 1839 to Ludhiana to serve under Mr. Robinson. Later on he accompanied Henry Lawrence to Lahore where he gained the confidence of the Punjab Chiefs and gentlemen with whom his work brought him into close contact. The late Sir Herbert Edwardes held Rajab Ali in the highest esteem. In 1848 he wrote of him ; "I believe his judgement on questions of policy to be valuable and that he has always proved to Sir Henry Lawrence a trust-worthy depository of most secret information. I hope also to be able to testify that the Maulvi though a 'Sahib-i-Kalam', is by no means afraid of the gleam of a 'shamshir'. He behaved with great coolness and bravery in the Cow Riot in Lahore in 1846". This opinion was endorsed by Currie, Clerk, Melvill, Barnes, Montgomery and Temple, all of whom knew the Maulvi well and had ample opportunities of studying his character. Sir Henry Lawrence wrote in 1853: "During the Lahore troubles I hardly know what we should have done without Rajab Ali ; and he has ever since been of the greatest use to me in all political arrangements and negotiations". In conferring on him jagir assignments valued at Rs. 2,696 per annum in Aligarh and both Talwandis (Tehsil Jagraon, Ludhiana District), the Governor-General, John Lawrence, remarked in 1868 that it was "In consideration of most valuable services rendered to the State at the time of negotiations with the Ruler of the Panjab to obtain permission for the British Force to cross

the Sikh Frontier and proceed to Afghanistan, in the campaigns which led to the annexation of the Panjab and during the siege of Delhi in 1857". During the Mutiny the Maulvi's services were placed at the disposal of the Quarter Master General for the purpose of assisting Hodson at Delhi in organising and working the intelligence service and he was thoroughly successful in the discharge of these important duties. He received a cash reward of Rs. 10,000 in recognition of his services during the siege.

Maulvi Rajab Ali was given the title of *Khan Bahadur* in 1846 and that of "*Arastu Jah*" (Great as Aristotle) in 1858. He died in 1869.

The family library of Rajab Ali at Jagraon was believed to contain some three thousand old and rare manuscripts in Persian and Arabic. Some of the most outstanding original historical materials out of the collection are now available in the Punjab State Archives, Patiala.

APPENDIX II

Letter, dated 1st May, 1854 ; From Honry Brereton, Deputy Commissioner, Ludhiana, to G.C. Barnes, Commissioner and Superintendent, Cis-Sutlej States, Kussowlie, runs : "In continuation of my letter No. 102, dated 7th last, I have the honour to inform you, that Rae Imam Buksh (sometimes called Mamoo Khan) upon receiving from me the personal property of the late Ranee of Raekote, produced a sword, which has been a treasured Heirloom in the family for some generations. He expressed a wish, that the sword should be forwarded to the Governor-General (A). It may be interesting to have its history, which is as follows" :—

2. When Gooroo Govind escaped from his enemies at Makhowal he sought refuge and received protection from the Raekote Chief [15] ; in gratitude for this kindness he presented him his sword, which was all he possessed with the injunction that it should not be worn or carried except in battle or in some great emergency [16].

3. The sword was treasured with religious care, until the time of the late Rai [17] who took it with him on occasion of a sporting excursion contrary to the earnest remonstrances of his followers. His horse happening to fall with him, he drew the sword to cut the stirrup leather by which he was entangled. The struggles of the horse, however, were violent and the Rai received from the

15. Rai Shahbaz Khan.

16. "*Parwardgar Tum ko salamt ba kra mat Rakhe aur riya sat par mukim farmave. Aur Is Shamsher ko mutbarak samajh kar baja tor par apne pas rakhna.*"

(Punjab Government Records 22-9-1854 (Anarkali Tomb, Lahore) No. 7-10.

17. Rai Ilyas Khan by name who died in A.D. 1802.

drawn weapon a wound on his thigh, the haemorrhage from which quickly caused his death.

4. This sword has been greatly sought by various Sikh chiefs from Ranjeet Singh[18] to the present Maharajah of Putteealah[19] who have at different times offered very large sums for its possession. All temptations have been, however, indignantly repelled by the late Ranee [20] and the presentation of this treasured memento of the Great Sikh Gooroo by Rai Imam Bux is, I think, a graceful act on his part and deserves acknoweldgement. It would be gratifying to him if the sword were forwarded to England, deposited in honour with the other historical relics of the Sikh Empire.

5. I have translated the following inscription from Goormookhi which is engraved on the sides of the blade:—

"May God's protection rest on me. There is one God, and true Gooroo whom I worship. This is the signature of the 10th Khalsa Ootar (i.e. Gooroo Govind). This sword is the protection of all kinds of harms, the Omnipresent God is with me always, God the protector of the lives of men".

6. I have deposited the sword in the Treasury ; pending your directions

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Notes (A) :

Excerpt from an application of Rai Imam Baksh and Rai Ahmadkhan to the Deputy Commissioner of Ludhiana in the persian Language :

"*Roze ke Janab mai Sahiba Muzamma mukarmma* (*Rani Bhag Bhari*) *rahlat farme shudand wa Sahib Deputy Commissioner Bahadur Zila Ludhiana barai mazart wa tasifi ma beksan wa daryaft hal ronaq afroz kasba Raikot shudand. Ma fidwyan bakhyal khud fahmida shamsher-i-mutbarka Guru Gobind Singh ra keh bihtar azin........?..........bebaha nazar Shahan bakhana-i-khud nadashtand khidmate Deputy Commissioner bahadur barai Nazar Shahnshah Ingiisia bahadur bazaria janab mustajab Governor-General Sahib Bahadur guzaranidem*"

(Punjab Government Records)
23 September, 1854—No. 7-a.

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18. Maharaja Ranjit Singh wanted to get this sword. Mian Kadar Baksh, a trusted officer of the Raja of Kapurthala, was sent for this purpose, but the Rani refused to part with the sword, for any amount of cash money or Jagir.

19. Maharaja Narindar Singh Sahib Bahadur of Patiala, who ruled Patiala State from 1845 to 1862.

20. Ranee Bhag Bharee, widow of Rai Ilyas Khan. She died in April, 1854.

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INDEX

A

Abdul Aziz : 92

Abdul Aziz, Maulana : 106

Abdul Haye, Mian : 111, 114

Abdul Qadir : 650

Abdul Rehman : 87

Abdul Rehman Khan : 663

Abohar : 190, 191, 338, 346, 592

Abul Fazal : 497

Abul Mansur Khan Safdar Jang : 65-69, 91

Abuwal : 356

Achhar Singh : 120

Aden : 272

Adina-Beg Khan : 68, 69

Afghanistan : 77, 79, 80, 82, 264, 336, 671

Africa : 270

Agra : 142

Ahluwalia, Fateh Singh : 73, 75

Ahluwalia, Nihal Singh : 84

Ahmadabad : 278

Ahmedgarh : 333, 339, 342, 347, 349, 362

Ahmad Khan, Rai ; 74, 672

Ahmad, Prince : 65

Ahmad Shah, Abdali : 65, 66, 68, 70, 461

Ajitsar : 536

Ajit Singh, Major : 119

Ajner : 71

Ajodhia : 166

Akalgarh : 56, 351, 356

Akaura : 148

Akbar : 62, 74, 141, 246, 319, 410, 411 650, 662, 670

Akbrabad : 670

Akhara : 342, 351, 355

Ala Singh, Maharaja : 64, 66, 70

Alamgir : 355, 638

Ala-ud-Din : 73, 410

Alawal Khan : 663

Alexander : 126, 127

Alibuzurag : 649

Aligarh : 106, 343, 355

Ali Muhammad Khan Ruhela : 412

Alisarmast : 649

Aliwal : 85

Allahabad : 106, 129, 305

Alour : 342

Altekar : 60

Alu Khan : 61

Amarakosha : 10

Amar Singh, Maharaja of Patiala : 70

Amar Singh : 124

Ambala : 1, 3, 4, 70, 73, 80, 86, 102, 106, 113, 172, 176, 178, 328, 337, 339, 362

Ambala Cantt. : 333, 490, 559

Amin : 670

Amir Shah : 647

Amloh : 343, 650

Amoghabhuti : 59, 653

Amrik Singh, Major General : 120

Amritsar : 1, 76, 100, 101, 106, 112, 114, 132, 146, 148,172, 254, 257, 286, 310, 311, 328, 333, 337, 339, 340, 372, 449, 476 526, 531, 559, 571

Anandpur : 145, 166

Andamans : 121

Andlu : 359

Apaga : 125

Apra ; 345, 347

Arahatpur : 656

Arjan Dev : 166

Arjan Singh : 122

Arnold D.W : 529

Asghar : 62

Ashvapati : 125

Asia : 118, 269

Assam : 278

Asi Kalan : 357

Atar Singh : 530

Atiana : 359

Atma Ram : 561

Attock : 99, 132, 176, 177

Auckland, Lord : 80

Aurangzeb : 63, 64, 638, 642, 649, 664, 667

Avicena : 563

Ayali Kalan : 353

Ayek ; 125

B

Babar : 61

Babarpur : 121

Bactria : 127

Badan Singh ; 102

Baddowal : 70, 73, 75, 84, 333, 342, 345, 347, 353, 531

Bandli Shah : 658

Bagga Khurd : 227

Bagh Singh ; 646

Bagli : 342

Bagli Kalan : 352

Bahadurgarh : 6, 313

Bahadur Khan : 662

Bahadurpur : 226

Bahadur Shah : 96

Bahawalpur : 133

Bahlol Lodi : 61, 62

Bahlolpur : 6, 10, 58, 60, 190, 246, 247, 329, 340, 342, 358, 500, 575

Bahrein : 272

Bahroz Khan : 68

Bahu Majra : 357

Bairam Khan : 62

Bairsi : 148

Bairsal : 119, 360

Balakot : 83

Balala : 6

Ballianwal : 80, 112 (Balliawal)

Bangar : 242

Bangsipura : 360

Bajwa, Sudha Singh : 71

Bakhat Mal : 655

Balak Singh, Baba : 99, 101, 146

Balban, Sultan : 668

Banarsi Dass Soni : 552

Banda : 64

Banohar : 353

Bannu : 109, 133

Baoopur : 6

Barewal : 353

Barewal Awanan : 227

Barki : 149

Barmalipur : 359

Barnala : 6, 176, 177, 339, 344, 346, 657

Barnard : 96

Barnes G.C. : 86, 95, 96

Baroda : 305

Barwala : 575, 603

सत्यमेव जयते

Basant : 668

Basant Singh : 87

Basawa Singh ; 75

Bassi Pathanan : 261, 266

Bassian (Kot Basia) : 4-6, 73, 75, 76, 80, 84, 120, 236, 338, 342, 351, 353, 362, 662

Batala : 106, 670

Beas ; 10, 139, 328

Bedi, Sahib Singh : 72, 74, 75

Bee Amman : 112

Begowal : 119, 359

Behlol Khan : 663

Belgium : 268

Benares :109

Bengal : 82

Ber Khurd : 358

Bet : 199, 200, 201, 426

Betini Ferry : 117

Bhadaur : 81

Bahagat Ram, Lala : 111

Bhagat Singh : 116

Bhagbhari, Rani : 72, 75

Bhag Singh, Raja ; 4, 73,75, 76

Bhaini : 99, 102, 103, 105, 149, 150

Bhaini Ala : 639

Bhaini Araian : 359

Bhaini Baringan : 359

Bhaini Darera : 574

Bhakra : 8, 10, 189, 193, 435

Bhakra Dam : 234, 239, 335

Bhalwal : 176

Bhamaddi : 357

Bhamipura : 215, 358

Bhani Sahib : 356

Bhandari, Kishan Chand : 78

Bander : 140

Bhanga Singh : 75

Bhan Singh : 121

Bhangal : 343

Bhanohad Punjab : 333,349

Bhari : 71, 329, 341, 342, 353

Bharoli : 65

Bharatgarh : 5

Bharatpur : 670

Bhatinda : 148, 190, 191, 310, 338, 339, 346, 372, 487, 488, 490, 587

Bhatner : 73

Bhattian : 215,361

Bharu : 73, 656

Bhilwan : 599

Bhaura : 529, 603

Bhopal : 670

Bhisham Pitama : 126

Bhourla : 352

Bhunder Mallah (Bhunderke) : 655

Bhundri : 6, 63, 85, 336, 341, 343, 359, 654

Bhupinder Singh, Major : 120

Bhurthala Mander : 6

Bhutta : 357

Bhyrowal : 4, 359

Bidhi Chand, Bhai : 655

Bihar : 116

Bija Kalan : 352

Bilaspur : 148, 229, 354

Biloch Frontier Tract : 133

Bilochistan : 133, 135

Bimal Chander (Jian Muni) : 548

Binjal : 353

Birch, G. : 2

Birk : 360

Birmi : 352

Bodewala : 355

Bohra : 345

Bokhara : 80

Bombay : 112, 242, 256, 263, 311, 313, 559,627

Boothgarh : 573

Bondly : 360

Bopa Rai : 121

Bopa Rai Kalan : 356

Brahma : 139

Brown, Edith Mary (Miss) : 138, 535, 549, 576

Brundi : 346, 354

Budh Singh : 103

Budhamati, Raja : 656

Budh Shah : 167

Buhara : 347

Bul : 350

Burj Hari Singh : 359

Burma : 103, 123, 150, 270, 272

Butahari : 354

Buwani : 190, 227, 354

Buzrag : 360

C

Calcutta : 82, 101, 106, 263, 328

Campbell, George : 87, 142

Central Asia : 58, 78

Central Punjab : 70

Ceylon : 265, 270

Chachhari : 355

Chak Kalan : 353

Chak Ram Dass : 103

Chak Sobhaga : 176

Chakkar : 342, 351, 355

Chakohi : 357

Chalia Ram : 123

Chain Beg : 655

Chaminda : 355

Chamkaur : 10, 652, 666

Chamkaur Sahib : 63, 347, 348

Chanan Singh : 208

Chandragupta : 497

Chandigarh : 1, 200, 211, 213, 225, 233, 254, 257, 258, 260, 261, 327, 329, 336, 337, 339, 340, 344, 345, 374, 446, 469, 507, 545, 546, 549-551, 556, 559, 562, 667, 588, 593, 598, 633

Chappar : 167, 315, 342, 354, 641

Charak : 563

Charan Kanwal : 342

Charan Singh, Baba : 139

Chari : 337, 361

Chauki Man : 333, 334, 341, 654

Chavan, Y.B. : 547

Chawa : 341, 342

Chawapail : 333, 334

Chawinda : 122

Chenab : 125, 168

Chenab Hethla : 176

Chhaurian : 358

Chimna : 355, 599

Chiniot : 650

Chintpurni : 138

Chisti, Suliman Shah : 649

Chounta : 335

Chuharpur : 664

Chuahar Singh : 121

Chup Shah : 658, 659

Cis-Satluj : 3-5, 70, 72, 76, 77, 79, 84-86, 125, 128, 246, 319, 327, 449, 461

Claude Martin, Wade : 2, 76, 78, 81

Clerk, George Russel : 2, 80, 670

Coke : 95

Constituency-Dakha : 623

Constituency-Dehlon : 615

Constituency (Double member constituency-Parliamentary) : 614

Constituency-Jagraon :615, 618, 620, 623

Constituency-Ludhiana City : 621

Constituency-Ludhiana City- North :615, 618, 621, 623

Constituency (Parliamentary)—Ludhiana : 617, 619,622

Constituency-Ludhiana City-South :615, 618, 621, 623

Constituency-Ludhiana Sadar : 615

Constituency-Khana : 621, 623

Constituency-Kum Kalan : 623

Constituency-Payal : 623

Constituency-Raikot : 618,620,623

Constituency-Samrala : 615, 618, 621,623

Constituency-Sidhwan Bet ; 620

Cowan : 100, 102

Cox : 87

Cunningham, Alexander, General : 59, 60, 653, 656

Currie, Fraderick : 670

Curtius : 126

Curzon, Lord : 463, 523

Czyechoslovakia : 272

D

Dacca : 132

Dad : 357

Dadabhai Narooji : 106

Dadhran : 356

Dadu : 133

Dahera : 352

Daiạn Kaur, Mai : 508

Dakha : 5, 73, 201, 228, 233, 236, 315, 329, 341, 353, 354, 398, 427, 492, 557, 571, 573.

Dalip Singh : 122

Dalla : 228, 342, 355

Damdama Sahib : 145, 651

Darogha : 68

Darudhana : 126

Davidson, H. : 415, 416, 450

Daya Kaur, Mai : 664

Daya Nand, Swami : 139

Daya Singh, Bhai : 666

Dayala, Bhai : 655

Deep Singh, Bhai : 644

Dehlon ; 215, 236, 259, 315, 329, 337-342, 342, 345, 362, 390, 391, 393, 394, 397, 401,402, 468, 518,533,571,573,641, 644.

Dehrka : 358

Dehru : 530, 575

Delhi : 1, 2, 5, 58, 59, 62-65, 72, 86, 88, 91-97, 141, 142, 150, 229, 256, 257, 269, 276, 313, 318, 333, 339, 340, 409, 412, 459, 497, 498, 514, 559, 638, 657, 667, 671.

Dera Gazi Khan : 133

Dera-Imailkhan : 133

Deoband : 116

Dev Puri : 651

Deva Singh : 121

Dewa Singh : 108

Dewatwal : 353

Dhamot : 227, 235, 341, 359

Dhandara : 70, 227, 343,

Dhandari (Kalan) : 227, 259 264, 333, 352,

Dhandari Khurd : 352

सत्यमेव जयते

Dhanwantri : 563

Dhangia : 355

Dharam Singh, Bhai : 664, 666

Dhat : 358

Dhaul Kalan : 575

Dhillon, Joginder Singh, Lieut- General: 119

Dholan : 355

Dhudike : 105, 344, 346

Dhulkot: 354, 489

Dhuri : 1, 333, 338, 339

Doaba : 146, 147

Doaba Bist (Jullundur) : 69

Dodhal Kalan : 359

Dolon Khurd : 357

Doraha : 63, 120, 190, 211, 221, 227, 236, 261, 313, 314, 316, 321, 333, 334, 338, 339, 343, 348, 349, 351, 362, 390, 391, 393, 394, 397, 402, 468, 494, 500, 504, 518, 557, 573, 579, 610, 667

Dugri : 343

Durgapur : 256

Dulah : 355

Duni Chand, Lala (Ambalvi) : 113, 116

Dupahar Dass, Baba : 644

Durrani, Ahmad Shad : 64, 69, 70

E

East Punjab : 172, 179, 181

Edmonstone : 4

England: 312

Erskine : 4

Europe : 311, 312

F

Faiz Talab Khan : 75

Fakhr-ud-Din : 68

Farash Khan : 67

Farhat Hussain : 83

Faridabad : 257

Faridkot : 73, 76, 148

Fatehgarh : 176, 177

Fatehjang : 196

Fatehgarh Nehwan : 353

Fatuhi Chaudhari : 643, 645

Fazal-ul-Din, Maulana : 97

Ferozepore (Cantt.) : 1, 3, 71, 74, 79, 80, 84, 85, 100, 105, 106, 132, 190, 191, 192, 200, 201, 206, 327, 329, 333, 336, 337, 339-341, 344, 350, 351, 372, 412, 446, 489, 556, 566, 587

Feroz Tuglak : 410

Ferrel : 10

Forsyth : 102

Frazer : 463

G

Gahaur : 354

Gainda Chaudhry : 645

Gajpat Singh, Raja : 4, 76

Ganges : 157

Ganguwal : 260, 261

Gani Khan : 63

Gare : 148

Garhi : 351

Garshankar : 345

Gauri, Ghiys-ud-Din : 73, 657

G. Campbell : 415

George, Thomas : 72, 74

Germany : 270

Ghadhi Mar : 659

Ghaggar : 125

Ghalib : 342

Ghalib Kalan : 228, 236, 355
Ghaloti : 227, 236
Ghangas : 354
Gharkan : 227
Garmela : 148
Ghawadi : 357
Ghazi-ud-Din : 69
Ghazni : 59, 101
Ghila : 75
Gholoti : 354
Ghujal : 356
Ghulam Mohayud--Din alias Bute Shah : 61
Ghulam Nabi Maulana : 92
Ghulam Rasul, Mian : 114
Ghungrali Rajputan : 357
Ghungrana : 333
Ghuram : 357, 644
Ghurani : 340
Ghurani : 340
Ghurani Kalan, 354, 575, 642, 643
Gil : 227, 333, 337, 338, 342, 345, 348, 349, 427, 598,
Gill : 148
Gillespie : 77
Gill, Sudha Singh : 71, 73,
Goa : 117
Gobindgarh : 261, 262, 339,
Gobind Singh, Guru : 63, 64, 99, 101, 149, 150, 166, 168, 639, 645, 661, 664, 665, 671.
Goh : 353
Gopalpura : 215
Goraya : 339
Gordon Walker : 417
Goslan : 353
Grewal, Rawind Singh, 118
Griffin, L.H. : 75
Gugga, Pir, 150, 166
Gujar, Ahmad : 74, 658
Gujar, Roshan : 72, 74
Gujarwal : 73, 109, 116, 122, 148, 211, 236, 341, 345, 347, 355, 412, 531
Gujranwala : 100, 125, 132, 146, 147, 173, 175, 546
Gujrat : 106, 127, 132, 176, 177, 278
Gulaba : 666
Gungrana : 6, 348, 349
Gurah : 359
Gurcharan Singh : 103
Gurdaspur : 133, 172, 372,
Gurdev Singh : 208
Gurdit Singh (Ladwa) : 73, 75
Gurmukh Singh : 110, 121, 140
Gurung Hill : 119
Guru Sar : 572, 655, 656,
Gurusar Sadhar : 338, 356,
Gwaliar : 100, 166, 642

H

Habib-Rehman, Maulana : 112-116
Hafiz Abdullah : 123
Hailey, Malcolm : 115
Hakumat Rai : 114
Halwara : 9, 120, 261, 329, 338, 339, 341, 352, 355, 362, 557, 573, 656
Hambowal : 358
Hambran : 354, 572
Hans : 122, 228, 355

Hans Kila : 354

Hansi : 72, 74

Hanuman : 139

Harappa : 497

Harbhajan Singh : 122

Hardit Singh : 124

Hardwar : 157

Hargana : 353

Hargobind, Guru : 166, 546, 642-644, 652, 655

Harike : 10, 73

Hari Singh, Guru : 103, 104, 150, 650

Harion (Khurd) : 168,600

Haripur : 83

Harnampura : 120

Harnam Singh : 122

Harparkash Kaur : 533, 547, 549,

Harry Smith : 84, 85

Haryana : 256, 257

Hasanpur : 123, 354

Hassan Khan : 74, 87

Hatur : 6, 63, 73, 315, 342, 346, 358, 578, 655-657

Hazara : 133

Hazrat Imam : 166

Hazrat Mohammad : 167

Hazro : 99, 149,

Hazurgarh : 6

Hearon (Hiran) : 359
Hans

Hedon : 216, 360, 575

Henry Olpherts : 92

Hera : 80

Himachal Pradesh : 148, 150, 254, 256, 257, 260

Himalayan (Region) : 77, 199, 335

Hindustan : 58, 86, 88, 319

Hiran : 75, 352

Hissar : 242, 333, 337, 344, 347, 562

Hissowal : 356

Hole : 359

Hongkong : 264, 272

Hoshiarpur : 1,100,132, 228, 246, 372

Hoshangabad : 670

Hamayun : 62

Hungary : 272

Hussain : 166

Hussain Ahmad Madni : 116

Hussain Khan : 663

Hyderabad : 133

Hyderabad Deccan : 99

I

Ikolahi : 338, 357,

Ilayas Khan : 72, 74, 75

Imam Bakhash Khan, Rai : 75

Imam Buksh, Rai, (Mamoo Khan) : 662, 671, 672

Inayat Ali : 83

Inayat Khan : 75, 86

Inder Singh : 121, 122

India : 5, 9, 10, 64, 70, 75, 77, 80, 82, 98, 106, 107, 110, 111, 116—120, 125, 130, 134, 144, 146, 152, 166, 173, 180, 181, 196, 205, 208-210, 222, 226, 228, 240, 246, 248, 250, 252, 254—256, 258, 259, 264, 270, 272, 273, 277, 284, 301, 304-306, 308, 309, 312, 313, 317, 320, 321, 328, 334, 517, 562

Indus : 126

Isewal : 121,354

Ishar Singh, Sant : 652, 659, 661

Ishri Singh, Raja : 66

Isru : 71, 200, 236, 338, 342, 357

Jabu Mazra: 71

Jaganpur : 167

Jagat Singh : 122

Jagehra (Jagerha) : 351

Jagjit Singh, Baba : 150, 641

Jagraon : 1,4-7,9,10, 59, 61, 63, 71,73—75, 84, 105, 112, 122, 123, 128, 129, 131, 134, 141, 142, 148, 151, 159, 166, 167, 176, 177, 180, 190, 191—193, 200, 201, 208, 211, 213, 221, 222, 228, 236, 242, 246, 247, 261, 265, 276, 279, 282, 306, 309, 312, 313, 314, 316, 319, 321, 324, 329, 333, 334, 336, 337, 339—344, 346 349, 355,356,362,390, 391, 393, 394,397, 398, 401, 402, 404, 412, 413, 417—419, 428, 429, 440, 468, 469, 472, 480, 483, 485, 491, 500, 505, 509, 510, 539, 547—549, 566, 571, 573, 579, 580, 587, 598, 607, 610, 655, 657, 659, 661, 662,671.

Jahan Sahah : 69

Jaipur : 127

Jaisalmer : 73, 148

Jakhal : 1, 333, 338

Jalal Khan : 61, 646

Jallianwala Bagh : 106

Jamalpur : 260, 261, 338, 342, 345

Jampalpur Awanan : 227, 352

Jammu : 101, 138, 256

Jammu & Kashmir ; 118, 145, 257, 364,

Jandi : 360

Jandiala : 348

Jandialli : 352

Jangpur : 358

Jani Khan : 68

Japan : 117, 268, 270, 271, 277

Jarg : 167, 337, 338, 343, 356, 427

Jarh Sahib : 340

Jasrath : 62

J

Jargari : 359

Jartauli : 338

Jaspal Bangar : 355

Jaspalon : 227, 333, 334, 342, 354

Jassa Singh : 99

Jassowal : 227, 333, 348, 349, 355

Jassowal Kalan; 358

Jaswant Singh Raja ; 75

Jatana : 354

Jatana Uncha : 337

Jawahar Mal Bhagat (Sain Sahib) :99, 149

Jawala Mukhi : 138

Jeewan Nagar : 150,641

Jerrom (Miss) : 536

Jhajewal : 75

Jhamat : 354, 575

Jhandala : 75

Jhang : 133

Jhar Sahib : 663,666

Jhelum : 88, 125, 126, 132, 146, 147, 173, 176, 177, 311

Jhorran : 341, 353

Jind : 45, 72, 73, 75, 76, 412, 646

Jirga : 658

Jiwan, Bhai : 655

Jodhan : 72, 74, 343, 357

Jodhwal : 232, 335, 336, 338

Jogi Mazra : 342

Joginder Nagar : 260

Joginder Singh, Major-General : 120

Johnson, Sherman E. (Dr) : 196

Johan Reef : 670

Johnstone : 89, 92

Jonnewal : 356

Jugiana : 360,599

Julab Mazra : 335

Jullundur : 1, 84, 87-89, 92, 106 117, 132, 172, 176, 177, 193, 225, 228, 257, 260, 261, 270, 286, 310, 332, 333, 339, 351, 362, 372,398, 446, 466, 487, 488, 490, 492, 533, 545, 559, 566, 588, 633, 654

Jullundur Doab : 1,61, 68, 72, 311

K

Kabul : 1, 59, 78, 81, 82, 86, 87, 90, 100, 650, 653, 655

Kahan Singh : 123

Kahlur : 148

Kaila : 120, 121

Kaithal ; 73

Kakrala Kalalan :360

Kalak : 354

Kalan : 572

Kaleran : 660

Kalha I: 73

Kalha II, Rai : 64, 66

Kalha III : 74

Kalhar : 354

Kali Devi: 138

Kalinga : 127

Kalsia : 176, 178

Kamalia ; 200

Kamma ; 200

Kanakh Ketu Raja : 656

Kandagat : 176

Kandhar : 655

Kanech : 227, 360, 644

Kangar : 148

Kaonke : 228, 337

Kaunke Kala : 356

Kapoor Singh : 123

Kapur Chand : 141

Kapurthala : 73, 84, 106, 372, 412, 413, 649, 658

Karachi : 133, 248, 311

Karamsar : 354

Karam Singh: 122

Karana : 125, 126

Kariana : 335

Kariam Bakhsh, Munshi : 107

Karnal : 2,92, 96, 172, 328, 489

Karoria, Bhai : 655

Kartar Singh, Risaldar : 120

Kartar Singh Saraba : 107, 108, 110, 111

Karttikeya : 61

Kashmir : 79, 86, 90, 101, 117, 127, 270, 459

Kasur : 75, 106

Katani : 644, 665

Katani Kalan : 236, 356

Katana Sahib : 666

Kathiarwar : 127

Kehar Singh : 123

Kehar Singh, Bhai : 661

Khamanon : 315, 468, 603,

Khamano Kalan : 233, 236, 336, 360, 397, 427, 492

Khandur : 358

Khanna : 6, 7, 71, 83, 131, 132, 134, 142, 151, 159, 166, 173, 180, 181, 193, 211, 221, 222, 236, 248, 261, 262, 267, 276, 279, 288, 306, 308, 309, 312-316, 321, 324, 329, 333, 334, 337-344, 348 349, 351, 352, 355, 356, 362,365 397, 427, 468, 469, 472, 488, 489, 494 500, 508, 509, 531, 538, 539, 545, 546, 548, 557, 571, 573, 579, 580, 592, 650, 663, 664, 667

Khanna Kalan: 167

Khanpur : 335, 336, 575,

Kharak Singh : 121

Kharar : 263, 347, 592

Kherian : 176

Khasi Kalan : 352

Khatra : 340

Khatran Chaharan : 354

Khawaja Ahad Shad : 106

Khawas Khan : 62

Khan Chand : 141

Khera : 6, 233, 336, 354, 492,

Kheri : 71, 87, 227, 329, 341, 342, 353

Kheri Naudh Singh : 598

Kheve Shah : 658, 659

Khilji, Alaudin : 141

Khizr Khan : 61, 62

Khurd : 200

Khushab : 176

Khushal Singh, Jamadar : 413

Kiratpur : 157

Kirpal Singh : 121

Kishan Dass : 121

Kishangarh : 357

Kishan Singh : 116

Kitchlew, Saif-ud-Din : 106, 116

Kodur : 256

Kohara : 315,329, 341, 345, 346, 352

Kohat : 133

Kohistan : 176

Kot : 75

Kotala : 360

Kot gangu Rai : 356

Kot Kamalia : 126

Kotla : 72, 102, 103, 261

Kotla Ajner : 353

Kotla Badla : 353

Kotla Bhari : 353

Kothi Loharan : 277

Kotla Shamaspur : 360

Krishna, Lord : 139, 165

Kubba : 6, 227

Kubli Kalan : 358

Kulu : 619

Kum : 10

Kumaun : 65

Kum Kalan : 345, 356, 427, 572, 575, 576, 578

Kundan Singh, Bhai Sahib : 661

Kurali : 347, 348

Kurukshetra : 172, 637

Kuth Shah, Saint : 654

Kuwait : 272

L

Lachman Kaur, Rani : 80

Lachmi, Rani : 73

Ladakh : 118, 364

Ladho, Rana : 655

Ladhran : 71, 426

Ladhwa : 73, 75, 84, 85, 412

Lahara : 335, 610

Lahore : 1, 4, 5, 58, 65, 70, 78-81, 84, 98-101, 106, 110, 115, 116, 121-123, 132, 142, 149, 246, 266, 305,337, 449, 462, 465, 476, 515, 546, 554, 560, 576, 650, 655, 667

Lajpat Rai, Lala : 105, 115

Lakha : 343, 358

Lakhpat Rai : 70

Lakshmi : 166

Lal Kalan : 6, 664

Lal Singh : 122

Lalauri Kalan : 352

Lalouri : 227

Lal Singh, Bhai : 73

Lalton/Laltan : 121, 345, 645

Lalton Kalan : 227, 357, 557, 574, 645

Lalton Khurd : 645

Lamma : 124, 228, 358

Lapal : 657

Lape Shah : 657, 658

Lapon : 6

Lapran :354

Larkana : 497

Larkins, Captain : 648

Lassai : 6

Latala : 354

Lawrence, Henry : 670

Lawrence, John : 670

Lahl : 354

Leitner, G.W. (Dr.) : 527, 529

Lil : 351

Lilan : 121, 228, 360, 598

Loudhowal : 333, 334, 337, 343, 352

Machhiwara : 7,9-12, 58, 59, 63, 65 69, 71, 120, 132, 141, 142, 168, 185, 215, 233, 236, 246, 247, 261, 306, 311-313, 324, 329, 337-342, 345, 346, 358, 362, 390, 391, 393, 394, 401, 427, 468, 492, 494, 500, 517, 518, 531, 578, 599, 661, 663, 665, 666

Macnaughten : 81,82

Madho Pershaud : 92

Madpur : 227, 357

Madras : 242

Magadha : 58

Maghar Singh, Sant : 662

Mahajan, Mehr Chand : 466

Luchnow : 99, 256

Ludhiana : 1-7, 11, 12, 14, 15, 59—63, 69-84, . 86-88, 90-97, 99, 101, 103, 105, -120, 125, 128, 129, 131-133, 138, 141, 142, 145, 150, 151, 156, 158-161, 164, 166-168, 172, 173, 176-178, 180, 181, 183, 187, 19[illegible], 193, 196, 197, 200, 201, 203-206, 210, 211, 213, 221, 222, 225, 226, 227—230, 233, 234, 237, 242-249, 251, 253-271, 273-275, 277-281, 285 289, 301, 302, 304-306, 308—310, 312-315, 317, 319—321, 324, 326 330, 332, 333, 335—345, 347, 349, 350, 353, 355, 356, 360, 362-365, 367, 368, 370, 373-375, 377-380, 381, 384, 390, 391, 393 394, 397, 398, 401-404, 406, 411—413 415, 417-419, 423, 427-430, 432-435, 437, 440, 443, 446, 447, 449, 463, 467-473, 478—483, 485, 488, 494, 496, 498, 500-504, 507, 510 518, 524, 526, 528, 529, 531-539, 542, 544, 545, 547—551, 553-554, 556-560, 565, 567, 569, 572, 573, 576, 578, 580, 587, 588, 591-595, 698, 607, 610-612, 626, 628-635, 637, 645, 646, 647, 651-654, 661, 663, 668-670

Lumsden OF ; 464

Lussara Ferry ; 89

Lyallpur : 75, 133, 146, 147, 173, 175-177

M

Mahatma Gandhi : 100, 104, 112, 113, 115, -117, 281, 525, 546

Mahavir, Lord : 166, 656

Mahdoodan : 6

Mahi : 127

Mahma Singh :

wala : 345

Mahmud (of Gazni) : 59, 653
Mahmud Shad : 80

Maj Genl, Raja : 654

Majithia, Ranjodh Singh : 84, 85

Majri : 122

Maik : 356

Makhowal : 673

Malaudh : 6, 71, 87, 102, 103, 148, 211, 236, 308, 315, 337, 338, 342, 344, 347, 348, 358, 412, 426, 427, 468, 531, 572, 649, 650

Malerkotla : 6, 11, 72, 74, 76, 86, 87, 102, 145, 329, 339-341, 343, 412, 488, 571, 641, 649

Malhipur : 120

Malik Ala-ud-Din Jani : 650

Mallah : 75, 121, 346, 356

Malleson : 94

Mal Mazra : 360

Malsian Bajan : 360

Malwa : 64, 125, 127, 128, 134, 147, 319, 413

Man : 228,358

Mandalay : 123, 124

Mandi : 150

Mandiani : 358

Mangla : 106

Mangal Singh : 114

Mangat : 185,361,390,401,402,518, 533, 557

Manjha : 70, 88, 135, 146-149

Manki Bagaur : 360

Manoki : 236, 343, 358, 427

Manpur : 65, 68, 190, 192

Mansarover : 10

Man Singh : 649, 664, 667

Mansuran : 109, 357

Mansurpur : 62

Manupr : 353, 603

Mardan : 133

Mari : 342

Mastan Singh : 122

Mathura : 127

Mattewala : 345

Mattewara : 71, 205, 229, 230, 319, 335,

Maya : 103

Mayo, Lord : 498

Mc Neile, Captain : 242

Mecca : 167

Medina : 167

Magasthense : 497

Mehatpur : 329, 341, 345

Mehan Singh Wala : 357

Mehr Ali Shah : 666,

Mehar Chand : 141

Melvill : 670

Mergui : 103

Metcalfe : 75, 76

Mhow : 117

Mianwali : 132

Mills, Captain : 415

Mir Hota : 1, 61, 645, 654

Mith Singh : 87

Mochpura : 80, 82, 112

Model Gram : 333

Moga ; 71, 105, 139, 171, 192, 206, 261, 339, 346, 488, 490, 566, 587

Mohabbatpur : 58, 59

Mohammed Shah, Emperor : 149

Mohanpur : 357

Mohi : 124, 358, 535, 536, 598, 603

Mohinder Singh : 122

Mohen-jo-daro : 497

Mokal, Rana : 73

Mohkam Din, Baba : 167, 658

Mokham Chand Diwan : 70, 73, 75, 659

Montgomery : 133, 175

Moranwali ;6
Morinda : 329, 337, 340, 361
Mor Karima : 359
Moulvi Rajab Ali : 79, 659
Mubarak Shah Jasrath : 62
Muhammad : 92
Muhammad Abdula : 92
Muhammad Alam (DC) : 116
Mihammad-Bin-Tuglak : 410
Muhammad (of Ghor) : 61
Muhammad Hakim : 650
Muhammad Hassan : 116
Muhammad Khan Dost : 80-82
Muhammad, Prophet : 144
Muhammad, Qazi, Pir (Of Solah) : 63
Muhammad Yasin : 113
Muin-u-Din Khan (Mir Mannu) ; 66-69
Mukandpur : 357
Muksudara : 354
Muqsudra
Muktsar : 490
Mullanpur : 313-316, 324, 333, 338, 339, 343, 349, 358, 494
Multan : 106, 126, 133, 142
Mundian : 338
Mundian Kalan : 352
Murray, W. : 2,76
Mutton (I) /(II) : 215
Muzafargarh : 133
Muzaffar Nagar : 339
Mysore : 256

N

Nabha : 72, 73, 75, 85, 87-89, 135, 148, 192 347 412
Nabi Khan : 63
Nadir Shah : 69, 646
Nagpur : 256, 310
Nagra : 360
Nahan : 2
Nahar Singh :22
Naiebad theh : 148
Nanak Dev, Guru : 1489, 166
Nanak Sar : 333, 334, 337, 349
Nandpur : 73, 121, 232, 280, 360
Nand Singh : 110, 121
Nand Singh Baba : 659
Nander : 146
Nangal : 345
Nangal Headworks : 189
Nangal Hydel Channel ; 189, 193
Nangal Kalan : 359
Nangal Khurd : 359
Nankana Sahib : 306, 307, 332
Naraingarh : 73
Narain Singh : 123, 533, 661, 662
Narain Singh, Bhai : 549
Narangwal : 109, 122, 148, 343, 574
Nasir Khan : 67, 68
Narsali : 200, 357, 557
Nathowal : 120, 574
Nau Nihal Singh, Kanwar : 99
Nawabshah : 133
Nawanshahr : 345, 347, 348
N.E.F.A. : 118, 364
Nilon Khurd : 6
Nehru, Jawahar Lal : 116, 592
Nehru, Moti Lal : 115
Neminatha : 143
Nepal : 77, 100, 101
Nicobar : 121

Nicollsoo : 87

Nihal Singh, Sant : 662

Nihang Khan : 1,61, 62, 645, 656

Nishanwala : 71

Nizampur : 359

Nulla Jano : 119

Nura : 661, 662

Nurpur : 352, 572

Nurpur Bet : 235, 343

Nur-un-Nisa Rani : 72, 75

O

Ochterlony, David : 2, 76, 77, 646, 649

P

Pakhowal : 5, 6, 73, 128, 148, 319, 339, 341-343, 346, 359, 374, 375, 390, 391 393, 394, 401, 402, 427, 518, 572

Pakistan : 117-120, 132, 134, 144 146, 172,-174, 179, 248, 284,340

Pakpatan : 106

Pala Singh : 123

Palampur : 552

Palwal : 112
  Palwala : 112

Pamal : 353

Pamali : 351, 353.

Pandori : 358

Panini : 125

Panipat : 62, 489

Panjaba : 6666

Panjgrain : 358, 575

Panjim : 117

Paona : 658

Paproudi : 215, 598

Paras Ram (Parshu Ram) : 142

Parsanatha : 143

Partap Singh : 103, 150, 640, 641,

Paryag : 637

Pataliputra : 497

Patiala : 1,3, 6, 63, 64, 66, 70, 72, 73, 92, 96, 102, 128, 130, 148, 190, 305, 339, 372, 397, 442, 468, 469, 476, 488, 504, 559, 578, 587, 588, 650, 671

Patil, Shahaji : 69

Patna : 146

Pawa : 167

Pawad : 148

Payal : 1,6, 7, 61, 63, 102, 128, 129, 134, 136, 141, 166, 190, 191, 192, 227, 335, 337,339-341, 359,362,347,427, 429, 468, 557, 572, 575, 578, 579, 642, 650-652

Pebbian : 117

Pepsu : 6, 128, 130, 176, 178

Peshawar : 64, 82, 133

Phagwara : 339

Phalia : 176

Phallewal : 346 355

Pheru Raien : 353

Phillaur : 11, 76, 84, 87, 89, 96, 328, 333, 348, 351, 463, 469, 537, 571, 647

Pindi Dass, Lala : 166

Poawat : 358

Pohir : 338, 352

Porian : 354

Preet Nagar : 633

Punjab : 1, 4, 5, 7, 58-60, 69, 73, 79, 82, 83, 86, 88, 93, 94, 96, 98, 99, 101, 105, 106, 108' 117, 120 , 125-127, 129, 131, 134-137, 139, -141, 147, 157, 158, 160, 169, 172, -174, 180, 181, 196, 205, 207, 209-211, 213, 216, 225, 228, 233, 235, 244-247, 249-251, 253 254, 256,-261, 266, 271, 283, 302,-306, 310, 313, 314, 317, 319, 320, 327, 328,

331, 332, 343, 350, 373, 404, 413, 442, 461, 462, 464-466 , 492, 499, 500, 504, 516, 528, 529, 546, 554, 561, 563, 598, 634, 638, 650, 656.

Puran Sing : 121

Q

Quetta : 133

Qaism Ali : 666

Qmar-ud-Din Khan, Nawab : 67

Qila Raipur : 167, 227, 236, 246, 333, 337, 339, 342, 348, 357, 643, 651

R

Ram Singh : 122

Ram Singh Guru : 99-105, 149, 155, 635, 641, 665

Randhir Singh Sant : 109, 122

Rangoon : 103, 104

Ranjit Singh, Maharaja : 1,4, 58, 72-79, 81, 83, 147, 412, 413, 461, 515, 560, 646 670, 672

Raochhine : 574

Raqba : 356

Rara (Sahib) : 341, 344, 651

Rasulpur : 356

Rattan Singh Giani : 100,

Rattowal : 356

Rauni : 236, 358, 573

Ravana : 166

Ravi : 7, 126, 128, 169, 170

Ravi Dass, Guru : 165

Rawalpindi : 132, 146, 172, 176-178

Razia, Sultana : 650

Rhazes : 563

Ricketts, G.H. M : 86-90, 92, 96, 647

Rikh Raja : 148

Ripon, :Lord 523

Rohila : 227

Rohno Kalan :357

Rohri : 142

Rohtak : 242

Rabon Unchi : 109

Rachhin : 354

Rahawan : 667

Rahon : 71, 329, 430, 341, 345, 347. 665

Rai, Ahamd : 661

Rai Alias : 658

Rai Bareilly :82

Rai Feroze : 656

Rai Kalah : 646, 657, 662,

Rai Kishan Chand : 413

Raikot : 64, 66, 69, 72, 73, 74, 75, 101 112, 131, 141, 158, 166, 167, 180, 211, 221, 222, 228, 236, 246, 279, 306, 313, 315, 324, 329, 337, 338, 339, 341, 344, 346, 347, 395, 363, 398, 412, 468, 494, 500, 509, 536, 538, 539, 557, 573, 578, 580, 645, 655, 661, 662

Raipur : 71, 148, 329, 341, 412, 531

Raipur Majri : 236

Rajasthan : 127, 132, 136, 148, 152, 256, 257

Rajewal : 357

Rajgarh : 603

Rajone Kalao : 359

Rajpura : 261

Rama : 64, 139, 166

Ramgarh : 252, 598, 603

Ramgarh Bhullar : 360

Ramgarh Sardaran : 259, 358

Rampur : 227, 359

Roomi : 356, 575

Ropar : 1, 10, 157, 189, 193, 335, 337 348, 350, 361, 372, 487, 489, 665

Ropar Headworks : 190

Rose, R. : 2

Rothney : 87

Rsabha : 143

Rudradaman: 60

Rulia Singh: 110, 121

Rumi: 228, 338

Rup: 668

Rupalon: 352

Rup Kaur: 148

Rurr: 102

S

Saadat Khan Zulfiqar Jang: 67, 68

Sabathu: 2

Sadhar: 236, 356, 397, 401, 468, 518, 546

Sadhu Singh, Bhai: 661

Saharanpur: 116

Sahayli ; 356

Sahibana : 352

Sahnewal: 5, 71, 73, 109, 112, 116, 120, 123, 226, 227, 228, 233, 235, 315, 321, 329, 333, 334, 337, 339, 341, 342, 345, 349, 360, 362, 397, 413, 468, 494, 572, 578, 651

Saharan Mazra : 354

Saif-ur-Rehman : 92

Saiyed Ahmad : 82, 83

Sajjan Singh : 122

Salandi : 352

Saleh Mohammad : 87

Salem Tabri : 338, 343, 361

Samanta Deva : 653

Sampuran Singh, Lieut-Col, : 120

Samrala: 1,5-7, 9-11, 65, 70, 71, 128, 129, 131, 134, 159, 160, 176, 177, 180, 190, 193, 200, 201, 206, 211, 213, 215, 221, 222, 226, 227, 232-234, 236, 259, 261, 273, 306, 312-316, 321, 324, 329, 334, 335, 337-347, 351, 360-362, 390, 391, 393, 394, 398, 401, 402, 404, 412, 417, 418, 419, 427, 429, 440, 468, 479, 482, 483, 485, 491, 492, 494, 500, 507, 509, 518, 535, 538, 539, 546, 557, 566, 572, 578, 579, 598, 627, 663, 664, 665, 668

Samudragupta : 61, 127

San-Francisco : 107

Sangat Singh Raja : 4,5, 76, 646

Sangatpura : 123

Sanghol : 337, 361, 557

Sangin Beg Khan : 67

Sangowal : 355, 668, 669

Sangrur : 1,6, 6, 145, 176, 191, 261, 372, 587,

Santa Singh, Balm : 114

Saraba : 107, 121, 356

Serai Lashkari Khan : 5

Saraswati : 125

Sargodha : 146, 147, 173, 175, 176

Sarup Singh : 4, 76

Sarwan Singh : 119

Sarwarpur : 360, 575

Satija, Chander Bhan : 106, 114

Satlana : 96, 97

Satluj : 1, 2, 3, 5, 7, 11, 14, 58, 61, 62, 62, 64, 65, 69-77, 79, 80, 82, 84-89, 91, 125, 126, 129, 168, 189, 190, 199, 200, 234, 239, 282, 332, 333, 335, 412, 413, 449, 638, 642, 645-647, 654, 663, 665

Sat Narayan : 139

Satya Pal (Dr.) : 116

Satyavan ; 126

Savarkar, V.D. : 93

Savitri, Princess : 126

Sawadi : 228, 430

Saya Kalan : 357

Seh : 227,352

Sehgal, Kidar Nath : 116

Sehgal, Vijay Kumar : 117, 118

Seraj ; 619

Sexana, Mohan Lal : 116

Shah Abdul Qadir, Maulana (Pir Roshan) 80--83, 91, 92, 94, 96—98

Shahab-ud-Din : 68

Shah Diwan : 663

Shah Hassan : 650

Shah Jahan, Emperor : 148, 663

Shahjahanpur : 73, 657

Shahkot : 345

Shah Mohammad Hussain : 83

Shah Muhammad Maulana : 106

Shahpur : 82, 87, 132, 176, 177

Shah Wali-ulla Delhlvi, Maulana ; 80

Shaka Kot : 75

Shankar : 357

Shankar Rai : 103

Sharma, Shiv Narain : 110

Shashthi : 61

Sheikh, Chachu (Tulsi Dass) ; 73

Shekih Daulat : 122

Sheikhpura : 359

Sheikhupura : 132, 332

Sherpur 123,; 335, 33 6,358, 658, 660

Sherpur Kalan : 124, 356

Shinde, Jankoji : 69

Shirazi, Muhammad Taqi Khan : 66, 68, 69

Shiva : 139

Shiwalik : 199

Shuja-ul-Mulk Shah : 77, 78, 80, 81

Shushrat : 563

Siahar : 652

Sialkot (Sakala) : 103, 125, 132, 277

Sidhan Daud : 358

Sidhu, Shiv Dev Singh : 117, 118

Sidhwan : 6, 9, 187, 190 192, 329, 241, 342, 351, 435, 487, 518, 658

Sidhwan Bet : 185, 236, 338, 342, 344, 346, 360, 390, 391, 393, 394, 398, 401, 468, 557, 568, 578, 660

Sidhwan Kalan ; 236

Sidhwan Khurd : 117, 33, 360, 533, 545 547, 548, 574

Sihala : 360

Sihar : 354

Sihawa : 359

Sikander, Lodhi : 1,61, 62, 87

Sinha, Sri Krishhna : 116

Simla : 4, 77, 256, 339, 560

Sind : 79, 133, 135, 142, 305, 312

Sirhihd : 6, 62, 63, 66, 68-70, 74, 191, 246, 261, 333, 339, 412, 646, 650, 662

Sirhind Canal : 187, 189, 190-192, 335 338, 340

Sirkup : 654

Sirsa : 150

Sirthala : 6,359

Sitla : 138

Sittana : 83

Siwaddi : 6

Siwalike : 10

Sobraon : 73, 85

Sohian : 358

Solah : 63, 658

Sontiwala : 71

Srinagar : 257
Sucha Singh : 108
Sudan : 272
Sujapur : 356, 575
Sukur : 133, 142
Sultanpur : 1,6, 61
Sunam : 650
Sunet : 58,-61, 121, 353, 649, 653, 654
Surjan Singh : 122
Sur, Sikandar : 62
Swaddhi : 359, 428, 531
Syed Ahmad Khan : 105, 106
Sylhet : 133

T

Tahlina Sahib : 536, 661
Taimur Shah : 69
Taj-ud-Din, Master : 113
Takhran : 167,358
Talagang : 176
Talwan : 348
Talwandi : 73, 75
Talwandi Kalan : 359
Talwandi Khurd : 351
Talwandi Rai : 359
Tam Kandi : 6
Tara Chand : 655
Tara Singh Ghaiba : 71, 73
Taylors, Joseph Henry : 670
Teg Bahadur, Guru : 63, 150, 166, 651
Tej-pur : 359
T. Gordon Walker : 450
Thaneser : 4, 73
Tharparkar : 133
Theh-Loharan : 649
Thornton : 87, 89
Tihara : 58, 59, 63, 336, 342, 575, 662
Todar Mal : 410
Todarpur: 340
Tobort : 58, 59, 653
Toosey : 352
Trans-Himalayan Region : 10
Trans-Satluj : 4, 79
Trichur : 256
Tsogsalu: 119
Tughan Rais : 62
Tulamba : 126
Tulsi Das ; 73, 657
Tuper C.M. : 461

U

Uch : 126
Uchch : 63, 64
Udho : 73
Umedpur : 5
Una : 74
Unani : 563
U.P. (Utter Pradesh) : 65, 106, 116, 132, 136, 139, 152, 159, 377,
Uppar Sind Frontier : 133
Ursabha : 143
Utalan : 6, 71, 259, 343, 360
Uttam Datta : 59, 653
Uttam Singh : 122

V

Vagbhat : 563
Vaishno Devi : 138
Varat : 59
Vardhamana Maha Vir Tirthankara : 143

Vashishtha : 10

Victoria, Queen : 97

Vidisa : 127

Vikramaditya, Chandragupta II : 127

Villayat Ali : 83

Vishnu : 139

Vishwamitra : 10

W

Wadhni : 86

Walayati Ram : 208

Wataba : 337

West Pakistan : 75, 98, 99, 139, 132, 134, 135, 142, 149, 168, 175, 178, 179, 210 266, 277, 311, 428, 380

West Punjab : 146, 147, 168, 172

Williams : 88, 89

Y

Yama : 126

Yamuna : 1, 3, 9, 64, 76, 125, 140, 240, 449

Yaudheyas : 60, 61

Yashodharaman Vardhana : 127

Yasha : 10

Yazid : 167

Yorke : 87, 88

Yusuf Khan : 1, 61, 645

Z

Zahir Wali Shah : 658

Zain Khan : 70

Zakariya Khan : 70

Zaman Shah : 80, 81

Zira : 71, 192